

**DEVELOPMENT OF INTERACTIVE LEARNING MODULE  
IN COMPUTER ACCOUNTING SUBJECT TO IMPROVE  
STUDENT MOTIVATION OF CLASS XI AK 1  
IN SMK NEGERI 1 YOGYAKARTA**

**UNDERGRADUATE THESIS**

This undergraduate thesis is submitted in partial fulfillment of the requirements to  
obtain the degree of Bachelor of Education in Faculty of Economics  
Yogyakarta State University



By:  
RINI PURNAWATI  
13803241071

**ACCOUNTING EDUCATION DEPARTMENT  
FACULTY OF ECONOMICS  
YOGYAKARTA STATE UNIVERSITY  
2017**

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Had been approved and validated on December 28<sup>th</sup>, 2016

To be defended in the front of Board of Examiners

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## VALIDATION



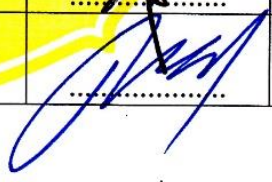
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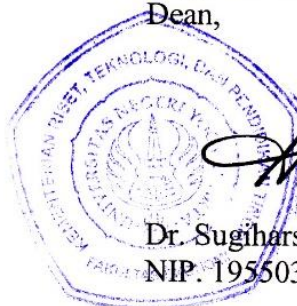
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## DECLARATION OF AUTHENTICITY

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Hereby declare that this undergraduate thesis is my own original work. According to my knowledge, there is no work or opinion written or published by others, except as reference or citation by following the prevalent procedure or scientific writing.

Yogyakarta, December 28<sup>th</sup>, 2016

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## **MOTTO**

“Man jadda wajada”

(Arab Proverb)

“Verily, along with every hardship is relief. Along with every hardship is relief.”

(Q.S. Al-Insyirah: 5-6)

“The best of human beings are useful for others.”

(HR. Ahmad)

## **DEDICATION**

All praise be to Allah SWT, the Almighty, the Merciful, and the Owner of the universe who has blessed me with beautiful things in my life. Prayers and greetings is always devoted to the great prophet Rasulullah Muhammad SAW. This simple work is dedicated to:

- ❖ My lovely parents, Mom and Dad, Suminem and Suratmin, who always support every step of mine with their prayers.
- ❖ My beloved brother, Budi Febriyanto, who always give me support in everything.
- ❖ My dearest, Slamet Nugroho, who always support and help me in every moment.
- ❖ Beloved Almamater, family of Accounting Education Programs, Faculty of Economics, Yogyakarta State University.

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**ABSTRACT**

This research aimed to develop learning media in the form of Interactive Learning Module for class XI student of Accounting Skills Competency at SMK Negeri 1 Yogyakarta with basic competency materials Making Financial Statements Using Spreadsheet. This research was also aimed to the feasibility of Interactive Learning Module as a learning media based on assessment by material expert, media expert, accounting teacher, and students; and to know the improvement of student motivation after using Interactive Learning Module.

This research used Research and Development (R & D) models, adapted from ADDIE development model, i.e: 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation. In the development stage, the feasibility of Interactive Learning Module was validated by one material expert, one media expert, one accounting teacher, and 32 students of class XI AK 2 as the student of field trials. Measurement of students' motivation conducted to 32 students of class XI AK 1. Data collection techniques in this development research using questionnaires. Data obtained from the questionnaires were analyzed by descriptive qualitative and quantitative.

The research results show that the Interactive Learning Module as a learning media in Computer Accounting Subject declared as Strongly Feasible category with average scores 4.25 by material expert, 4.34 by media expert, 4.34 by accounting teacher, and 4.23 by students. Based on Student Motivation analysis before and after the use of Interactive Learning Module obtained an increase of 5.7% from 70.43% to 76.13%. In the paired sample t-test obtained empirical  $t = -5.654$  with sig. 0.000 which showed significant measurement, so the conclusion is the development of Interactive Learning Module can improve Student Motivation.

**Keywords:** Learning Media, Interactive Learning Module, Student Motivation, ADDIE, SMK, Spreadsheet, Making Financial Statement

**PENGEMBANGAN MODUL PEMBELAJARAN INTERAKTIF  
MATA PELAJARAN KOMPUTER AKUNTANSI UNTUK  
MENINGKATKAN MOTIVASI BELAJAR SISWA  
KELAS XI AK 1 SMK NEGERI 1 YOGYAKARTA**

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**ABSTRAK**

*Penelitian ini bertujuan untuk mengembangkan media pembelajaran berupa Modul Pembelajaran Interaktif untuk siswa kelas XI Kompetensi Keahlian Akuntansi di SMK Negeri 1 Yogyakarta dengan materi kompetensi dasar Membuat Laporan Keuangan Menggunakan Paket Program Pengolah Angka/Spreadsheet. Penelitian ini juga bertujuan untuk mengetahui kelayakan Modul Pembelajaran Interaktif sebagai media pembelajaran berdasarkan penilaian ahli materi, ahli media, guru akuntansi, dan siswa; serta mengetahui peningkatan motivasi belajar siswa sesudah penggunaan Modul Pembelajaran Interaktif.*

*Penelitian ini menggunakan metode penelitian dan pengembangan atau Research and Development (R&D) yang diadaptasi dari model pengembangan ADDIE yaitu: 1) Analysis, 2) Design, 3) Development, 4) Implementation, dan 5) Evaluation. Pada tahap Development, Modul Pembelajaran Interaktif dinilai kelayakannya oleh satu dosen ahli materi, satu dosen ahli media, satu guru akuntansi, dan 32 siswa kelas XI AK 2 sebagai siswa uji coba lapangan. Pengukuran motivasi belajar siswa dilakukan terhadap 32 siswa kelas XI AK 1. Teknik pengumpulan data dalam penelitian pengembangan ini menggunakan angket. Data yang diperoleh dari angket dianalisis secara deskriptif kualitatif dan kuantitatif.*

*Hasil penelitian menunjukkan bahwa Modul Pembelajaran Interaktif sebagai media pembelajaran Komputer Akuntansi termasuk dalam kategori Sangat Layak dengan skor rata-rata oleh ahli materi 4,25, oleh ahli media 4,34, oleh guru akuntansi 4,34, dan oleh siswa 4,23. Berdasarkan analisis Motivasi Belajar Siswa sebelum dan sesudah penggunaan Modul Pembelajaran Interaktif diperoleh peningkatan sebesar 5,7% dari 70,43% menjadi 76,13%. Pada uji *t* berpasangan diperoleh *t* hitung sebesar -5,654 dengan sig. 0,000 yang menunjukkan pengukuran signifikan, sehingga kesimpulannya adalah pengembangan Modul Pembelajaran Interaktif dapat meningkatkan Motivasi Belajar Siswa.*

**Kata Kunci:** *Media Pembelajaran, Modul Pembelajaran Interaktif, Motivasi Belajar, ADDIE, SMK, Spreadsheet, Membuat Laporan*

## FOREWORD

First of all, I would like to thank Allah SWT the Almighty that has given me bless, mercy, and guidance so this undergraduate thesis entitled “Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta” can be finished. I realize that it would not have been possible without the support of many people. Therefore, I would like to express my deepest gratitude to the following:

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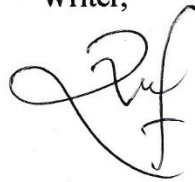


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The researcher hopes that their kindness get a better reward by Allah SWT. Finally, researcher hope that this work will be usefull for the readers.

Yogyakarta, December 28<sup>th</sup>, 2016

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## **CHAPTER I INTRODUCTION**

### **A. Problem Background**

One of the manifestations of human culture is education that is dynamic and grows. Changes or the development of education is a thing that is supposed to happen in line with the demands of a better future. The development of education can't be separated from the development of information technology. The development of information technology has changed the lives of human beings from conventional to modern.

Technological development continues to encourage progress in the field of education. The growing use of technology in the field of education has a positive impact on learning activities. The learning process becomes more interesting because it uses advanced facilities and learning can be done everywhere and every time (Risnawati, 2015: 1). Learning using technology can be easier to achieve the learning objectives because essentially the technology is a tool that makes it easy to human.

The purpose of learning is to achieve changes in behavior or competence in students after participating in learning activities. To achieve these objectives, the student must have the motivation or encouragement to learn and follow the learning process. According to Sanjaya (2013: 135) motivation can be interpreted as a boost that allows students to take action and do something. Motivation is a very important aspect of learning, without the motivation, students do not have the willingness to learn. In student self, there are two factors that influence student motivation, there

are internal factors and external factors. Internal factors are caused by the student itself, such as laziness and do not pay attention to the teacher during the learning process. External factors are factors that come from the environment outside the individual that affect the motivation to learn, for example, not conducive learning environment, ineffective learning methods, learning media less attractive, and so on. Generating motivation from both internal and external are part of the roles and duties of teachers in each of the learning processes.

The use of learning media can increase the motivation to learn. According to Sadiman, et al (2011: 7) media is everything that can be used to deliver a message from the sender to the receiver so it can stimulate thoughts, feelings, and interests as well as the student's attention such that the learning process occurs. Learning media can enhance student learning process that expected to enhance the learning outcomes achieved.

Vocational High School (SMK) is an institution of formal education equivalent to High School (SMA) and is a continuation of the previous levels of SMP, MTs, or equivalent. SMK Negeri 1 Yogyakarta is one of Vocational High School of Business and Management in Yogyakarta, which has three Skills Competency namely Accounting, Marketing, and Administration Office. Each program has skill competencies that must be mastered by each student.

Basic competence making financial statements using a spreadsheet is one of the competencies that must be mastered by Vocational High School

students majoring in Accounting. These competencies are regarded as core competencies or major competencies in Computer Accounting Subject that required a deep level understanding for students. These competencies are considered to be quite difficult for the students. The difficulty is that students should be completely familiar with the steps and formulas functions that must be entered into the spreadsheet. Therefore, teachers should provide a media that can help students understand the flow or the steps to make those financial statements.

SMK Negeri 1 Yogyakarta has facilities in learning to support student competencies. In this school has provided computer laboratory as a practice place of the students, including the practice of Computer Accounting in Accounting Skills Competency. Teacher as a facilitator in education is also provided with the ability to use technology for learning media. However, there are infrastructure facilities in schools have not been fully utilized optimally by teachers to make learning media that stimulate student motivation.

Computer Accounting learning process at SMK Negeri 1 Yogyakarta has not implemented information technology and communication in the form of computer-based media, and the lack of interactive learning media development. Learning media used are still monotonous, causing students bored and learning becomes less than optimal. Media used in the form of textbooks and slide presentation. The book contains theories and steps or tutorial using a computer accounting program. Teachers tend to use lecture

methods and demonstrations. Demonstrations conducted by the teacher to guide students to understand the material by displaying computer accounting program that is being run using the LCD and projector. This is a challenge for students who can't follow the steps described by the teacher because of time and teachers judged too quickly explain the steps.

Based on observations conducted on April 11, 2016, in Class XI AK 1 SMK Negeri 1 Yogyakarta, it was found that the student motivation was low. Could be seen from the number of students who wanted to ask the teacher only by 17%, or 6 out of 32 students. Students who noted the important points of learning only by 37.5%, or 12 students. Students who talked about things outside of lesson during learning process were 13 students or 36%. Besides that, students were still lazy, seen from some students who did not immediately go to class when the bell rang, students were sleepy, laid their heads on the table, and did not open the book learning package. From the results of observations made by researchers, it is concluded that the learning activities at SMK Negeri 1 Yogyakarta require a technology-based learning media interactive and interesting for the students to improve student motivation. The existence of learning media in teaching methods is one of the efforts to improve the interaction between teachers and students and students with learning environments.

According to Arsyad (2011: 25), the benefits of the use of learning media in teaching and learning process is as follows: (1) Learning media can clarify the presentation of messages and information so it could



facilitate and enhance the learning process and results, (2) Learning media can improve and direct the student attention so it can generate learning motivation, more direct interaction between the students and the environment, and the possibility of students to learn on their own according to their ability and interest, (3) Learning media can overcome the limitations of the senses, space, and time, and (4) Learning media can provide a common experience of the students about events in their environment, as well as enable direct interaction with teachers, community, and environment.

One of the media that can be used as an alternative is a learning module. The module can be viewed as a package program that is organized in the form of specific units for the purpose of learning. In fact, the module is a kind of unity of planned learning activities, designed to help individual learners achieve their learning goals (Sukiman, 2012: 131). Learning module will further improve student motivation when made with features that support interaction in the learning process. Therefore, Interactive Learning Module created with computer software that students can use to learn independently and it used by teachers as a learning presentation media.

Based on the above problems, it is necessary to do research to develop Interactive Learning Module in Computer Accounting Subject to improve student motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta with an attractive design and easy to understand by students. In addition, the use of

Interactive Learning Module can be used as an alternative to improve the quality of learning process Computer Accounting Subject.

## **B. Problem Identification**

Based on the problem background describe above, the problems can be identified as follows:

1. Learning media in Computer Accounting practices used in SMK Negeri 1 Yogyakarta limited to books and tutorials directly using LCD and projector.
2. Teachers tend to use lecture methods and demonstration only, and do not make use of the media that further enhance the students' learning passion.
3. Basic competence making financial statements using spreadsheets is considered quite difficult by the students.
4. Based on the observation, student motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta was low.
5. The lack of the use of interactive media such as Interactive Learning Module in Computer Accounting Subject.

## **C. Problem Limitation**

This research is limited to the development of Interactive Learning Module in Computer Accounting Subjects to improve student motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta. Interactive Learning Module that was developed is limited to basic competence making financial statements using a spreadsheet. Interactive Learning Module

created with computer software that has many features to support interaction in the learning process, so it will improve student motivation. The media will also be used by teachers as a learning presentation media and alternative to improve the quality of learning process in Computer Accounting Subject.

#### **D. Problem Formulation**

Based on the above problem limitation, the formulation of the problem can be stated as follows:

1. How is the development of Interactive Learning Module in Computer Accounting Subject for student of Class XI AK 1 in SMK Negeri 1 Yogyakarta?
2. How is the feasibility of Interactive Learning Module in Computer Accounting Subject for student of Class XI AK 1 in SMK Negeri 1 Yogyakarta based on material expert, media expert, accounting teacher, and students?
3. How is the improvement of student motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta after using Interactive Learning Module Computer Accounting Subject?

#### **E. Research Objectives**

Based on the problems formulation above, the purposes of this research are as follows:

1. To develop an Interactive Learning Module in Computer Accounting Subject for student of Class XI AK 1 in SMK Negeri 1 Yogyakarta.

2. To know the feasibility of Interactive Learning Module in Computer Accounting Subject for student of Class XI AK 1 in SMK Negeri 1 Yogyakarta based on material expert, media expert, accounting teacher, and students.
3. To know the improvement of student motivation after using Interactive Learning Module in Computer Accounting Subject for student of Class XI AK 1 in SMK Negeri 1 Yogyakarta.

#### **F. Research Benefits**

The results of this research are expected to provide benefits both theoretically and practically.

1. Theoretical Benefits
  - a. Increase knowledge about the development of learning media in the form of Interactive Learning Module.
  - b. Source reference similar research for the future.
  - c. Contribute to the implementation of interactive media development.
2. Practical Benefits
  - a. For Researcher

Researcher has the ability in the development of learning media that will be implemented when it would become an educator. Additionally, to increase knowledge research of R & D that has contributed to the advancement of education.

b. For Teachers

Provide additional alternative media that can be used in accounting learning, so teachers have a lot of reference media for use in learning. Additionally, the number of known media teachers will make the learning process more interesting and less monotonous and can achieve the expected goals.

c. For Students

Help students understand the teaching materials in the form of Interactive Learning Module that draw on Computer Accounting Subject.

## **G. Specifications Developed Product**

The product specifications are expected of this research are:

1. Learning media in the form of Interactive Learning Module contain materials the basic competencies making financial statements using a spreadsheet.
2. Learning media in the form of Interactive Learning Module created using Lectora Inspire Software able to attract the willingness of students to study independently while creating an enjoyable learning atmosphere so can improve student motivation.
3. The end of the media type is a file extension \* .exe that can be run without installation Lectora Inspire Software first on a computer or laptop.

## **H. Development Assumptions**

Research development of Interactive Learning Module requires the use of computers in the learning activities. Therefore, in order to be fully utilized there are several assumptions underlying this research are:

1. The material is based on the development of basic competencies, thus suitable for all class XI student of SMK Accounting Department.
2. The school where conducting this research was to have adequate computer equipment.
3. Computers in schools can be used individually by all students.
4. Students already have basic skills of computer operation. This capability is necessary because the whole process of learning shaped computer interaction with users.
5. Educators assumed to have been adept at using the computer so that it can provide a solution in case of technical problems related to computer hardware.

## **CHAPTER II LITERATURE REVIEW**

### **A. Theoretical Review**

#### **1. Learning Motivation**

##### **a. Definition of Learning Motivation**

Motivation comes from the word "motive" which can be interpreted as an effort to encourage someone to do something. Motives can be said as the driving force from the inside and are within the subject to perform certain activities in order to achieve certain goals. Starting from the word "motive", the motivation can be defined as the driving force that actively encourages someone to do something (Sardiman, 2012: 73).

According to Sardiman (2012: 75), in learning process, motivation can be said as a whole driving force within the students who lead learning activities, which ensures continuity of learning activities, and that provides direction on learning activities so that the desired objectives can be achieved. Learning motivation is a psychological factor that is non-intellectual. The role is typical in the growth passion, a sense of excitement, and passion for learning. Someone must have the motivation to learn in himself in order to obtain the desired result.

According to Mc Donald in Hamalik (2011: 158), "Motivation is an energy change within the person characterized by affective arousal and anticipatory goal reaction". The nature of learning

motivation by Uno (2015: 23) is the internal and external encouragement to the students who are learning to make changes behavior with some indicators or elements that support. It has a big role in a person's success in learning.

According to Wlodkowsky (1985), quoted by Sugihartono, et al (2013: 78), motivation is a condition that causes or lead to certain behaviors and that gives direction and resilience of such behavior. High learning motivation reflected from perseverance that is not easily broken to achieve success although confronted by many difficulties.

From the definition of learning motivation, we can conclude that the learning motivation is everything from inside or outside to stimulate and encourage students psychologically for learning activities and provide direction on learning activities, so that students not only learn, but also appreciate and enjoy learning.

#### **b. Theories of Motivation**

Give motivation to students means encourage the students to do something. At first, the students feel there is a need and desire to do a learning activity. According to Sardiman (2012: 78), the person doing the activity driven by the factors of biological necessity, instinct, other elements mental health and the influence of the development of human culture. These factors can't be



separated from the matter of necessity because someone will be encouraged to do something if they feel there is a need.

Motivation theory was born and developed among the psychologists. According to psychologists, motivation has a hierarchy or levels, from bottom to top. According to Sardiman (2012: 80), there are several theories of motivation are always related to a matter of necessity i.e. physiological needs, safety needs, love, and affection needs, and need to realize themselves.

In accordance with the above-mentioned needs, Maslow in Sardiman (2012: 81) mentions the pyramid hierarchy of needs is more fully as shown below:

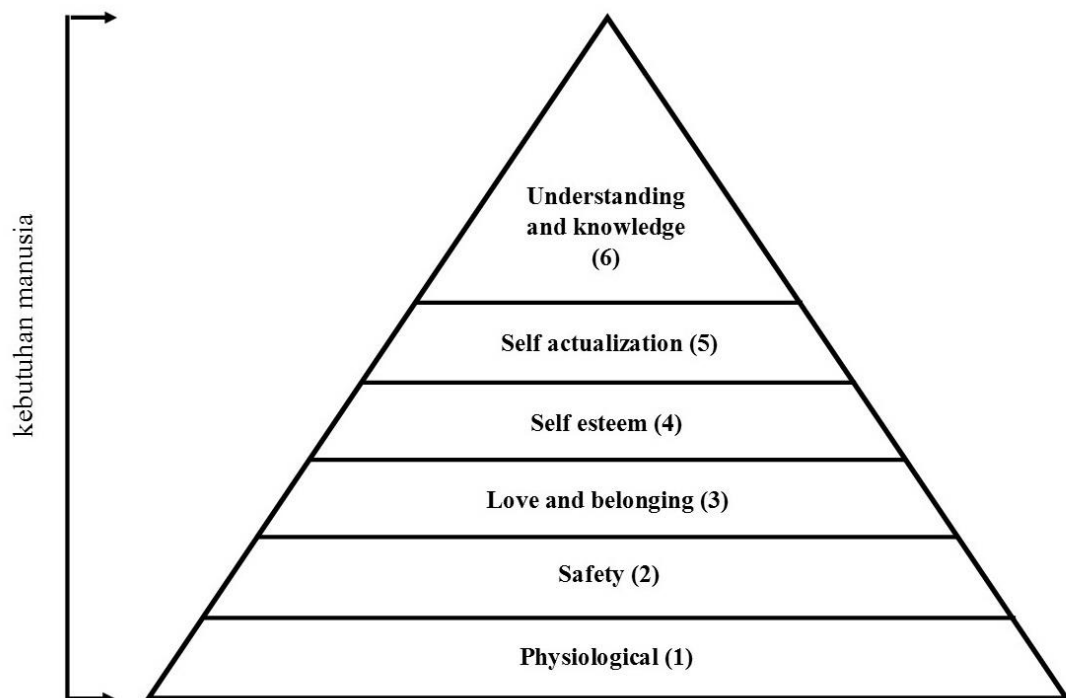


Figure 1. Maslow's Hierarchy of Needs Pyramid

Each level in the hierarchy above can only be raised if it had been filled with motivation levels underneath. If a teacher wants the students to learn well, it must be filled with the lowest level to the highest. In addition, there are other theories need to know (Sardiman, 2012: 81) is as follows:

1) Instinct Theory

Figures instinct theory is Mc. Dougall (1908). According to this theory the actions of each human being assumed as the type of animal behavior. Human action is said to be always associated with instinct or nature. In responding to their needs as if no one learned.

2) Physiological Theory

This theory is often called Behavior Theories. This theory states that all human action is rooted in an attempt to meet the satisfaction and organic needs or the need for physical interests (primary needs).

3) Psychoanalytic Theory

Figures of this theory is Freud. This theory is similar to the instinct theory, but more emphasis on the elements that exist in the human psyche. This theory states that every human action arises because of the element of the human person, namely id and ego.

### **c. Various of Motivation**

Kind or type of motivation can be viewed from different perspectives. Here are a variety of motivations, according to Sardiman (2012: 86-91), among others:

- 1) Motivation seen from the base formation
  - a) Congenital motivation, motif carried by a person from birth, so that motivation appear without studied.
  - b) The motives are studied, the motive arising learned by someone.
- 2) The types of motivation according to Frandsen
  - a) Cognitive motives, the intrinsic symptoms relating to individual satisfaction.
  - b) Self-expression, the desire for self-actualization.
  - c) Self-enhancement, the desire to improve one's self-advancement.
- 3) Types of motivation according to the division of Woodworth and Marquis
  - a) Motives or organic needs, for example: the need to drink, eat, breathe, sexual act and needs to rest.
  - b) Emergency motives, which are included in this type of motif, among others: the urge to save himself, the urge to retaliate, to strive, to hunt, and arise from external stimuli.

- c) Objective motives, in this case concerning the need to explore, to manipulate, to take an interest.
- 4) Physical and spiritual motivation
  - a) Physical motivation included this motivation for example: reflex, automatic instinct, and passion.
  - b) Spiritual motivation included this motivation for example: willingness.
- 5) Intrinsic and extrinsic motivation
  - a) Intrinsic motivation, motives are active or function they do not need to be stimulated from the outside, because inside every individual had encouragement to do something.
  - b) Extrinsic motivation, motives are active and functioning due to the stimulation from the outside.

According to Biggs and Telfer (1994), quoted by Sugihartono, et al (2013: 78) kinds of motivation can be divided into four groups as follows:

- 1) Instrumental motivation, meaning that students learn because it is driven by reward or to avoid punishment, such as the concept of reward and punishment.
- 2) Social motivation, means that students learn to the implementation of the task, in this case the involvement of students in tasks stand out.

- 3) Achievement motivation, means that students studying for achievement or success that has been set forth.
- 4) Intrinsic motivation, means that students learn because of their own desires.

According to Siregar (2002: 50), motivation can be divided into intrinsic motivation and extrinsic motivation. Intrinsic motivation is the motivation that comes from within the individual without external stimuli so that impulse come from within his soul. Extrinsic motivation is a motivation that comes from outside such as giving compliments, giving the value, use of media interest, to the giving of gifts.

#### **d. Benefits of Learning Motivation**

Sugihartono, et al (2013: 78) mentions the benefits of high motivation can be seen from the nature of the behavior of students, among others: (1) the quality of the involvement of students in the study were very high, (2) their feelings and effective involvement of the student in learning, (3) their efforts to always keep the high motivation to learn.

In addition to the benefits of these motivations, there are three functions of motivation in learning by Sardiman (2012: 85), as follows: (1) encourage people to do something, (2) determine the direction or objectives to be achieved, (3) selecting actions or determine what should be done in order to achieve the goal.

In harmony with what is disclosed Sardiman (2012) functions of motivation according to Hamalik (2011: 161) are as follows: (1) encourage the emergence of an act, (2) motivation as directors of the desired objectives, (3) motivation as a driver.

#### **e. Indicators of Learning Motivation**

Knowledge and understanding of the indicators of the learning motivation are required by researchers when it will make the instrument relating to the learning motivation. It is intended that the instruments used to be more precise, valid, and reliable. The indicators of motivation that can be used according to Uno (2015: 23), as follows:

##### **1) There is a passion and desire to succeed**

Someone who has the urge and desire to succeed will tend to have the spirit to try harder with high intensity and effort.

##### **2) The drive and the need to learn**

Someone who has a high motivation always feel that he is still lacking, so he felt the need, and raced to keep studying.

##### **3) There is hope and ideals of the future**

Ideals inherent in a person would provide a strong motivation, because with the ideals of a person has goals that will make motivated to continue learning.

4) There is award in learning

The existence rewards in learning can motivate a person to be more motivated in learning. The award can be a reinforcement for one's motivation to learn.

5) The interest activity in learning

Fun learning activities that will make a person excited about learning, so he was pleased when participating in learning activities.

6) There is a conducive learning environment

The learning environment is having an impact one's learning spirit. Comfortable learning environment will create a fun learning environment and vice versa.

If learners have these indicators, meaning that learners have motivation in learning. Things that affect the learning process can be improved and enhanced in order to increase students' motivation. Low motivation in students can be enhanced or improved by paying attention the factors.

**f. Factors Affecting Learning Motivation**

According to Imron quoted by Siregar (2011: 53), there are six factors that affected in the learning motivation, as follows:

1) Students' aspiration

Aspiration is one of the factors that affecting learning motivation. If student have aspirations, they will have tendency

to have high motivation because they want to chase their aspiration.

2) Students' ability

Each student has different ability. If students known their ability in a specific department, they will be motivated to keep going on learning and developing their ability in that department.

3) Students' condition

Students' condition consist of physical condition and spiritual condition. The physical condition affected students' motivation. If students are tired, they will hard to focus and soncentrate in the learning process. But, if they are in a good condition, they will have learning motivation. The spiritual condition is about students' mental condition. If students are in the mood and not stress about something, they will also have high motivation to learn.

4) Students' environmental condition

The environmental conditions consist of physical environment and social environment. If physical environment around the students is not comfortable, students will get difficulties to concentrate in learning activities. The example of social environment are friends and family. If they are not



showing a good common of learning, it creates a low learning motivation.

#### 5) Dynamic factors of learning

The dynamic factors are learning material, learning media, and learning method. They also give an effect to the learning motivation. The teacher should choose the best method, use the best media, and deliver the learning material that suitable with students' characteristic to motivate the students.

#### 6) Teacher's effort to educate student

The way teacher teaching in the class affected the students' learning motivation. Students are not easy to motivate if they do not have any interest in learning process. So, it becomes a teacher assignment to make a good condition of learning in a class.

Based on description above, the media can affected students' learning motivation. This research aims to generate or improve learning motivation through the development of media. Media developed in the form of interactive modules are expected to be used by teachers as a learning media that triggers the motivation of students.

## **2. Accounting Learning**

### **a. Learn and Learning**

According to Sanjaya (2013: 112), learn is considered as process of behavior change as a result of experience and training.

Hilgard in Sanjaya (2013: 112), “Learning is the process by which an activity originates or changed through training procedures (whether in the laboratory or in the natural environment) as distinguished from changes by factors not attributable to training”.

According to Siregar (2011: 3) learn is a complex process that happens to everyone and lasts a lifetime which have characteristics among others:

- 1) Change of behavior in the form of knowledge (cognitive), skills (psychomotor), as well as values and attitudes (affective).
- 2) Change is not temporary, but settled and can be saved in memory.
- 3) Change came with the effort and the process caused by the interaction with the environment.
- 4) Changes are not only caused by physical growth or maturity, not because of exhaustion, disease or the influence of drugs.

According to Sugihartono, et al (2013: 74), learn is a process of change in behavior as a result of individual interactions with the environment in meeting their needs. Not all behavior is classified as learning activities. The behavior is categorized as a learning behavior can be characterized as follows:

- 1) Changes in behavior occur consciously.
- 2) Changes are continuous and functional.
- 3) Changes are positive and active.

- 4) Changes are permanent.
- 5) Changes in learning aimed or directed.
- 6) The changes include all aspects of behavior.

From the experts opinion it can be concluded that learn is an activity carried out by someone consciously to acquire additional knowledge for positive changes in knowledge, skills and overall attitude.

According to Sugihartono, et al (2013: 81) study is an effort that is done deliberately by educators to deliver science, organize, and create a system environment with a variety of methods so that students can doing activities to learn effectively and efficiently with optimum results. Meanwhile, according to Gagne (1977) in Siregar (2011: 12), learning is a set of external events which are designed to support multiple learning processes that are internal.

The characteristics of learning by Siregar (2011: 13), among others:

- 1) Learning is a conscious and deliberate effort.
- 2) Learning should make students learn.
- 3) The learning objectives must be set before the exercise is conducted.
- 4) The implementation controlled, either the content, timing, process, as well as outcome.

From the definition above, we can conclude that learning is an effort by learners or educators consciously to facilitate learning and make students learn so that learning objectives can be achieved.

#### **b. Computer Accounting Learning**

In Dictionary of Indonesian Language accounting is defined as the art of recording and interpretation financial transactions with a transaction due to an economic entity. According to Jusuf (2011: 4) accounting is an information system that measures business activity, process the data into a report, and communicate the results to the decision makers. According to Reeve, Warren, and Duchac translated by Wahyuni et al (2009: 9), accounting is an information system that provides reports to stakeholders on the activities and economic condition of the company.

American Accounting Association (AAA) in Handoko (2004: 2):

“Accounting is the process of identifying, measuring, and reporting economic information in a company that made possible the assessment and decision-making to those who use the information.”

From several statements accounting terms, it can be concluded that the accounting is a process of an organization providing financial information to be used by interested parties as a basis for a decision that comes from financial transactions.

The word computer comes from the Latin “computare” or in English “to compute” which means counting (Khoiruddin and

Darsono, 2012: 1). However, with the development of information and communication technology is more advanced, the job count only be one part of the data processing to produce an information. Definition of a computer also referred to as a computer system. The computer system consists of three components, namely: hardware, software, and brainware.

Computer accounting is an accounting system where the computer as a technology for running applications that are used in processing accounting transactions and also to generate financial statements in a company. Many types of applications used for accounting, multiple application programs/software that are often used in education is a spreadsheet (Microsoft Excel), Accurate, MYOB Accounting, Zahir Accounting and Cash Register. From the many applications of the computer, spreadsheet program (Microsoft Excel) is a software that is common and is popularly used in Indonesia. This software is also commonly used by the Vocational High School to teach computer accounting subjects.

Learning Computer Accounting is an effort made to understand the study of an accounting system where the computer as a technology for running applications that are used in processing accounting transactions and at the same time to produce financial statements that will be used stakeholders as a basis for decision making.

### **c. Computer Accounting Using Spreadsheet**

According to Khoiruddin and Darsono (2012: 11) spreadsheet is a table of values arranged in rows and columns. Each value can have a relationship that has defined other values. If one changed the value of other values also need to be changed. Software spreadsheets used for office purposes. There are several types of spreadsheets, for example: Microsoft Excel (MS Office Excel), Lotus 1-2-3 (Lotus SmartSuite), StarCalc (StarOffice), KSpread (KOffice), Gnumeric (Gnome Office), and others.

Microsoft Excel or Microsoft Office Excel is a spreadsheet program created and distributed by Microsoft Corporation for Microsoft Windows operating systems and Mac OS (Noviar and Suciono, 2013: 10). Microsoft Excel is an electronic spreadsheet general purpose working under Windows operating systems (Khoiruddin and Darsono, 2012: 14). Microsoft Excel program into a computer program that is popular and widely used. Microsoft Excel allows users to process data to the list and present the data graphically. Its use in accounting for example in the manufacture of the financial statements that require a lot of calculations, the use of mathematical and logic functions in a report, and data management by displaying charts or pivot tables.

### 3. Competency Standard Operating a Spreadsheet

#### a. Definition of Competency Standard

Based on the Regulation of the Minister of National Education of the Republic of Indonesia Number 41 Year 2007 About Standard Process for Unit Elementary and Secondary Education, Competency Standard is the ability qualification minimal of students that illustrate mastery of the knowledge, attitudes, and skills to be achieved in each class and/or the semester at a subjects. Competency standards are divided into basic competency. Basic competence is the ability to master a number of students in certain subjects as a reference to the development of indicators of competence in a subject. Basic competence is a translation Competency Standards which the material scope is narrower than the Competency Standards.

Development of learning media in this research adapted to the curriculum used at SMK Negeri 1 Yogyakarta in class XI Academic Year 2016/2017 i.e. *Kurikulum Tingkat Satuan Pendidikan* (KTSP). Competency standard used is Operating a Spreadsheet with code 119 KK 09.02. Basic competence developed is Making Financial Statement Using Spreadsheets.

## **b. Basic Competency Making Financial Statement Using Spreadsheet**

Basic competencies are translated into indicators of competence. Based on the Regulation of the Minister of National Education of the Republic of Indonesia Number 41 Year 2007 About Standard Process for Primary and Secondary Education Unit, indicators of competence are behaviors that can be measured and/or observed to demonstrate achievement of certain basic competencies that the reference assessment subjects. Indicators of achievement of competencies formulated using the verb operations that can be observed and measured, which includes knowledge, attitudes, and skills.

Basic Competence Making Financial Statement Using Spreadsheets contains material Making Accounting Cycle of Services Company Using Spreadsheet. There are several steps that must be taken to make the accounting cycle, is as follows:

### **1) Creating Account List**

The first step taken to make the accounting cycle using a spreadsheet is to make a list of accounts. A list of accounts is a table that contains the account number and account name used by the company. List of account created by typing directly in the Ms. Excel program.



## 2) Creating Beginning Balance

Beginning balance is a list that contains the balances of all account used by the company at any given time (a certain date), before the start of the new accounting period. The beginning balance can be created by copying the list of accounts and add the debit and credit balances.

## 3) Creating General Journal

After preparing the list of accounts and beginning balance, it can begin to analyze the transaction and enter transactions into the general journal company. General journal is a tool to record corporate transactions conducted chronologically by indicating account to be debited and credited and the amount of rupiah each. General journal created by applying vlookup and icons Data Form to enter the transaction.

## 4) Creating General Ledger

After finished making general journal, the next step is to make a great book to group and summarize the effect of transactions into the appropriate accounts. In the ledger, each account will have its own form as a place to post (transfer) transactions from general journal. Accounts in the ledger will be grouped according to the classification of types of accounts, such as: Current Assets, Fixed Assets, Liabilities, Equity, Income and Expenses. Each group account is created in a

different worksheet. The ledger can be created by applying vlookup and data advanced.

#### 5) Creating Trial Balance

After all the account posted to the general ledger, then at the end of the period necessary to prepare a trial balance. The purpose of making a trial balance is to examine that after all posting, amount of debit equal to the amount of credit. Column balances on the balance sheet is filled by entering the final account balance is concerned.

#### 6) Creating Adjustment Journal

Adjustment Journal made to each account reflects the actual amount at the end of the period. The steps to create the adjusting entries is the same as the creating of general ledger by applying vlookup and icons data form.

#### 7) Creating Work Sheet

Work sheet is a columnar paper that is designed to collect the all the necessary accounting data at the time the company will prepare its financial statements in a systematic way. There are five types of the columns of the work sheet, the Trial Balance, Adjustment, Balance after Adjusted, Income Statement and Balance Sheet. Each has a debit and credit columns and its contents also has a different formula.

## 8) Creating Financial Statement

Financial statements can be made by making a Form first and then copy each of your accounts and balances contained in the work sheet. There are three kinds of financial statements to be made by the company, i.e.:

### a) Income Statement

Income Statement is a report showing revenues, expenses, and profits/losses in certain periods.

### b) Statement of Changes in Capital

Statement of changes in capital is a report that shows the addition or reduction of capital and the amount of capital at the end of a certain period.

### c) Balance Sheet

Balance is a report that shows the position of assets, liabilities, and capital of the company on a certain date.

After the completion of financial statements, then can create financial reports in print form and graph.

## 4. Learning Media

### a. Definition of Media

According to Sanjaya (2013: 163), in general, the media is a plural word of "medium", which means the intermediary or introduction. The word of "media" applicable to a variety of activities or business, such as the delivery of messages in the

media, introductory magnetic media or hot in the field of technical fields. The term media is used also in the field of teaching or education so that the term becomes a medium of education or learning media.

Rossi and Breidle (1966) in Sanjaya (2013: 163) argues that learning media is all over the tools and materials that can be used to achieve educational goals such as radio, television, books, newspapers, magazines, and so on. Tools such as radio and television is the learning media if used and programmed for education.

However, the media not only in the form of equipment or material, but also other things that allow the students can acquire knowledge. Gerlach and Ely (1980) in Sanjaya (2013: 163) states: "A medium, conceived is any person, material or event that establishes condition which enable the learner to acquire knowledge, skills, and attitude." According to Gerlach, media include people, materials, equipment, or activities that create conditions that enable the student to acquire knowledge, skills and attitudes. So in this definition the media is not just an intermediary tool such as TV, radio, slides, printed materials, but include people or humans as a source of learning or also in the form of activities such as discussions, seminars, field trips, simulations, etc. are

conditioned to increase knowledge and insight, changing the attitudes of the students, or to improving the skill.

According to Daryanto (2013: 6), learning media is anything that can be used to deliver the message (study materials), so it can stimulate attention, interests, thoughts, and feelings of students in learning activities to achieve learning objectives.

#### **b. Types and Clasifications of Learning Media**

According to Sudjana and Rivai (2002: 3), there are several types of commonly used medium of instruction in the teaching process, namely:

##### **1) Two Dimensional Media**

Two dimensional media called a graphic media, media that has a length and width. The examples of the graphic media are: images, photographs, graphics, charts, or diagrams, posters, cartoons, comics and others.

##### **2) Three Dimensional Media**

Three dimensional media is media that shaped the model, such as the solid model, the model cross-section, stacking model, working model, mock-up, diorama, and others.

##### **3) Projections Media**

Media projection is a medium that can be used with the help of a projector, such as slides, films strips, films, use of OHP and others.

According to Sanjaya (2013: 176), learning media can be classified into several classifications depending on the viewpoint to see it.

- 1) In terms of its nature, the media can be divided into:
  - a) Audio media, which media or media that can be heard only have sound elements such as radio and voice recording.
  - b) Visual media, media that can only be seen, does not contain elements of sound. That included into this medium is a film, slide, photograph, transparency, painting, drawing, and other forms of printed material such as graphics media.
  - c) Audio-visual media, the type of media that contain elements of sounds and images that can be seen, for example, a videotape, a wide range of film sizes, slide the sound, and others.
- 2) In terms of ability to reach, the media can be divided into:
  - a) Media which has the power to cover a broad and simultaneous such as radio and television.
  - b) Media which has the power to cover limited by space and time as the film slides, film, video, and others.
- 3) In terms of method or technique of application, media can be divided into:
  - a) The media projected as films, slides, film strips, and transparency.

- b) The media is not projected as images, photographs, paintings, radio, and more.

In this research, learning media in the form of interactive module included on the type of media projections, audiovisual media, and the media projected. The type of media in the form of interactive module can be classified into one type of media depends from what viewpoint.

### **c. Benefits of Learning Media**

According to Sudjana and Rivai (2002: 2), learning media can enhance student learning process that expected to enhance the learning outcomes achieved. Benefits of teaching media in the learning process of students, among others:

- 1) The learning process will attract more attention so it can improve motivation to learn.
- 2) Learning materials will be clearly so it can be better understood by the students, and enable the student controlled teaching purposes better.
- 3) Method of teaching will be more varied, not solely verbal communication through the narrative of words by the teacher, so that students do not get bored and teachers do not run out of steam.

- 4) Students are more doing activities to learn, because students do not just listen to the description of the teacher, but also other activities such as observing, doing, demonstrate, and others.

According Daryanto (2013: 5) media in general have utility as follows:

- 1) Clarify the message so as not too verbalists.
- 2) Overcoming the limitations of space, time, energy and power of the senses.
- 3) Potential passion to learn.
- 4) Allow children to learn independently.
- 5) Giving stimulation, experience, and create the same perception

According to Sanjaya (2011: 169-170), specially learning media has a function and a role for:

- 1) Capturing an object or certain events.
- 2) Manipulating situation, events, or object.
- 3) Add the passion and learning motivation of student.

#### **d. Selection of Learning Media**

A wide variety of learning media is not necessarily used for all of the learning process, but the teacher or educator must choose the most appropriate media. According to Sudjana and Rivai (2002: 4) in selecting the media for the sake of teaching should pay attention to the following criteria:



- 1) Accuracy with teaching purposes.
- 2) Support to the content of the lesson material.
- 3) Ease of getting media.
- 4) The skills of teachers in using it.
- 5) Available time to use it.
- 6) In accordance with the level of students' thinking.

According to Ibrahim and Syaodih (2010: 120-121) factors to consider in choosing the right media is:

- 1) The usefulness of the various types of media.
- 2) The ability of teachers to use a particular type of media.
- 3) Flexibility or flexibility in its use.
- 4) Compliance with the allocation of time and supporting facilities.
- 5) Their availability
- 6) Cost

## **5. Interactive Learning Module**

### **a. Definition of Interactive Learning Module**

Modules in Indonesian dictionary means a program activities of teaching and learning that can be studied by the students with a minimum help of a tutor, including planning objectives to be achieved in a clear, provision of learning materials, equipment needed, as well as tools for appraisers, measure the success of student in the completion of the lesson. According to Nasution

(2011: 205), the module is a complete unit that stands alone and consists of a series of learning activities are arranged to help students achieve a number of objectives that were defined specially and clearly.

Interactive in Indonesian dictionary means mutually action or mutual inter-relationships or active. According to Arsyad (2011: 100), interactive concept in teaching is often associated with the use of computers. Interaction in computer-based teaching basically includes three elements, namely: (1) the instructional sequence adjusted to student achievement, (2) the answer or response to the students' work, and (3) feedback adjusted to what is done by student. One of the design principles of the use of computers as an extra helper in learning otherwise known as Computer Assisted Instruction (CAI). CAI (Daryanto, 2010: 149) is the use of a computer directly with the students about the content of the lesson, provide training, and test the students' progress.

From the opinion of some experts, we can conclude that the interactive module are teaching materials that are intended for students to learn independently with or without the guidance of a teacher using a combination of two or more media (audio, text, graphics, images, animation, and video). To produce a good interactive module, the following are some of the characteristics that must be considered (Riyana, 2007: 7).

### 1) Self Instructional

Self instructional module is a characteristic that allows a person to learn independently and not depend on the other. To fulfill the character of self instruction, then the module should contain: 1) learning objectives clearly, and can describe the achievement of core competence and basic competences; 2) learning materials are packed in units of small activities/specific, making it easier thoroughly studied; 3) examples and illustrations that support the clarity of presentation of learning materials; 4) practice questions, duties and the like which allows to measure student mastery; 5) contextual, namely the material presented associated with the atmosphere, tasks or activities and the environmental context of the student; 6) use simple language and communicative; 7) assessment instrument, which allows students self-assessment; and 8) feedback on student assessment, so that students know the level of mastery of the material.

### 2) Self Contained

Self contained means all learning material to the competence or sub competencies written in the module as a whole. The purpose of this concept is to give students the opportunity to learn the learning material completely because the material is packed in a single unified whole. If you must do

the division or separation of materials for a basic competence, the separation must be done with caution and attention to the breadth of basic competencies that must be mastered by the student.

### 3) Stand Alone

Stand-alone module is being developed not depend on other teaching materials or should not be used together with other teaching materials. Using the module, the student does not require other instructional materials to study and work assignments on that module. If students still use and rely on teaching materials other than the modules are used, the teaching material is not categorized as a stand-alone module.

### 4) Adaptive

Module should have a high level adaptive power of development of science and technology. The module is said to be adaptive if that module able to adjust the development of science and technology, and flexible to use in various places. Adaptive module contains learning materials and software that can be used up to a certain time.

### 5) User Friendly

Module should meet the rules user friendly or familiar to its users. Each instruction and exposure information shown to be helpful and friendly to users, including the convenience of the

user in response, accessing accordance with the desire. The use of simple language and easy to understand is one form of user friendly.

#### 6) Representation of Contents

Interactive learning does not just move the text of the book. The material should be selected that is truly representative to be made interactive learning, for example, a special material that requires an element of animation, video, simulations, demonstrations, and games. Students not only read text but also see an animation of a process that resembles the actual process.

#### 7) Visualization with Multimedia

The material is packed with multimedia that combines text, animation, sound, and video-on-demand material. It is considered quite effective for teaching materials that are applicable, proceeds, relatively inaccessible, dangerous if directly practiced, and has a high accuracy rate.

#### 8) Interesting Display and High Resolution Quality

An attractive display by reproduce images/illustrations and objects according to the demands of material, will increase the interest of students to teaching materials, not saturated, but fun.

#### 9) Response of Learning and Strengthening

Interactive modules provide a response to a given stimulus by the students at the time of operating the program. Each

response is possible for a given reinforcement automatically pre-programmed and the strengthening of the response from the students. Strengthening given to increase student motivation and interest in the material.

According to Smaldino, et al (2011: 279), a teaching module is a complete teaching unit designed to be used by a learner or a small group of learners without the presence of a teacher. Because the overall goal of this module is to facilitate learning without regular supervision, all elements of the given subject teachers usually must be formed into a set of printed materials, audiovisual or computer-based (or any combination of it all).

Interactive learning module is a module that was developed some sort of program or software that are complementary to one another so that the module is interactive. In this research interactive modules is a module-based computer by using Software Lectora Inspire as the primary display containing text, images, sound, animation, and video according to the needs include interactive buttons.

#### **b. Lectora Inspire Software**

Lectora is Authoring Tool for development e-learning content developed by Trivantis Corporation. Lectora Inspire able to create online courses quickly and simply. Its founder was Timothy D. Loudermilk in Cincinnati, Ohio, USA in 1999. In 2011, Lectora

gain 5 awards in the field of products and the best presentation tools e-learning technology. So naturally more than 50 companies or institutions in the world choose Lectora.

Lectora is also equipped with other applications that support the media to be more interactive. Lectora Inspire coverage is as follows:

- 1) Flypaper for Lectora: Creating learning more creative and engaging by adding flash animations, transitions, and special effects.
- 2) Camtasia for Lectora: Creating a professional tutorial easily capture video, flash animation, or 3D design software.
- 3) Snagit for Lectora: Capturing what's on the desktop to make the image (picture).

Lectora Inspire also has several advantages over other authoring tool, as follows:

- 1) Lectora can be used to create websites, interactive e-learning content, and presentation of a product or a company profile.
- 2) The features provided Lectora Inspire very easy for novice users to create multimedia (audio and video) learning.
- 3) For a teacher, Lectora Inspire can facilitate in making learning media.
- 4) Templates provided Lectora quite complete.
- 5) Lectora provides a Media Library that helps the user.

- 6) Lectora very allows users to convert Microsoft PowerPoint presentations into e-learning content.
- 7) Content developed with the software Lectora can be published to various outputs such as HTML5, Single File Executable (.exe), CD-ROM, as well as e-learning standards such as SCORM and AICC.

## **6. Feasibility Aspects of Interactive Learning Module**

### **a. Definition of Feasibility**

According to *Kamus Besar Bahasa Indonesia* (KBBI), Feasibility is about (appropriate, feasible) that can be done. Feasibility of an object is created if it meets the established criteria. The criteria are used for comparison. Then the results of the comparison can be used to determine the decision. Validity in research development is a process to assess whether the design of the product can be used effectively or not. Validation is done by presenting experts who are experienced to assess new products that have been designed so that can know the weaknesses and strengths of the product (Sugiyono, 2015: 414).

### **b. Criteria of Feasibility Interactive Learning Module**

To determine the validity of the products in the form of development of ICT-based learning material required certain criteria. Criteria for a product in the form of development of ICT-



based learning material according to Walker and Hess (Arsyad, 2011: 175) are as follows:

- 1) The quality of the content and objectives, which include: accuracy, interests, completeness, balance, interest / concern, fairness, and appropriateness to the situation of students.
- 2) The learning quality, which include: the provision of learning opportunities, providing assistance for learning, motivating quality, learning flexibility, relationship with other learning programs, learning quality of social interaction, the quality of tests and assessments, and giving effect to the students, teachers, and learning
- 3) The technical quality, which include: readability, ease of use, quality views/impressions, handling response, program management, and documentation.

According to Wahono (2006), there are three aspects of learning media assessment criteria, are as follows:

- 1) Software Engineering
  - a) Effective and efficient in the development and use of learning media
  - b) Reliable
  - c) Maintainable
  - d) Reusability (easy to use and simple in operation)

- e) The accuracy of selection of the type of applications, software, or tool for development
  - f) Compatibility (learning media can be installed/run on a variety of hardware and software)
  - g) Packaging integrated learning media program and easy in execution
  - h) Program documentation of learning media complete, include: manual installation, trouble shooting, and program design.
  - i) Reusable
- 2) Learning Design
- a) Clarity of learning objectives
  - b) The relevance of the learning objectives with Competency Standard, Basic Competence, and Curriculum
  - c) The scope and depth of learning objectives
  - d) The accuracy of the use of learning strategies
  - e) Interactivity
  - f) Provision of motivation to learn
  - g) Contextual and actuality
  - h) The completion and quality of learning materials
  - i) Compliance with the goal of learning materials
  - j) The depth of the material
  - k) Easy to understand

- l) Systematic, trace, and logic flow clear
  - m) The clarity of description, discussion, examples, simulations, and exercises
  - n) Consistency evaluation with the aim of learning
  - o) The accuracy and permanence evaluation tools
  - p) The provision of feedback on the evaluation results
- 3) Visual Communication
- a) Communicative.
  - b) Creative in ideas and casting ideas
  - c) Simple and Alluring
  - d) Audio
  - e) Visual
  - f) Media moves
  - g) Interactive Layout

Based on the opinion of some experts on various aspects and criteria for learning media assessment, the researchers set out some aspects and assessment criteria Interactive Learning Module and judged by an material expert, media expert, and accouting teaching.

## **7. Models of Development**

### **a. The 4D Model**

The 4-D Model is a development model that consists of four stages: Define, Design, Develop and Disseminate. This model was

first developed by Thiagarajan, Semmel, and Semmel in 1974 (Trianto, 2011: 189-192). Stage of development using the 4D model is as follows:

1) Define

This stage consists of five main steps, namely: a preliminary analysis, student analysis, task analysis, concept analysis, and the formulation of learning objectives.

2) Design

This stage consists of three main steps, namely: preparation of the test, media selection, and selection of media formats.

3) Develop

This stage consists of three main steps, namely validation along with revisions, learning simulations, and limited trial. Then will be implemented on a larger area.

4) Disseminate

Product printed and disseminated so that people can use it.

**b. The ADDIE Model**

The mid-1990s, educational technology experts equate their perceptions of instructional design which is based on a system approach called ADDIE. ADDIE Model is an acronym for Analysis, Design, Development or production, Implementation or delivery, and Evaluations. And then this model was developed by Dick and Carey in 1996 to design a learning system. Stages of

development of this learning model or method according to Mulyatiningsih (2011: 185-186) is as follows:

1) Analysis

Development of a model/learning method starts from the background problems caused by model/method that is already not fit the needs of students. This stage includes the process of answering the questions: (1) whether the models/methods can solve problems of learning, (2) whether the models/methods has the support facilities to be used, (3) whether the teacher is able to use the model/new learning methods.

2) Design

This design is conceptual and will guide the further development process. Design process begins with the formulation of learning objectives, lesson plan, and develop a learning tool.

3) Development

At this stage, a concept that has been prepared in the design stage is realized in the product ready to be implemented.

4) Implementation

At this stage, the design is implemented for students to get feedback on the next application of models/methods.

## 5) Evaluation

The evaluation results are used to provide feedback and revision. Evaluation can see the impact of learning, to measure the achievement of the objectives product development, what has been achieved the object, and find out how to make students achieve better results.

### c. The ASSURE Model

According to Prawiradilaga (2007: 59) ASSURE models initiated by Heinich, et al. since the 1980s, and continues to be developed by Smaldino, et al. until now. Development stages ASSURE model is as follows:

#### 1) Analize learner

Things that need to be identified is a common characteristic, an initial competence, and learning styles.

#### 2) State objectives

Things that need to be considered is the factor A (Audience = Students), B (Behavior = Behavior Learning), C (Condition = Learning Environment), and D (Degree = requirements/criteria of success).

#### 3) Manage the material and content of subjects.

Things that need to be analyzed are kinds of knowledge, the nature of knowledge, and an alternative presentation.

- 4) Select and utilize methods, media, and material.

Steps taken from the selection of media formats and learning resources customized to the subject up to the selection of appropriate methods.

#### **d. The 10 Steps Model**

The 10 steps development model by Borg and Gall (1989) in Syaodih (2015: 169) are as follows:

- 1) Research and information collecting.

At this stage the researchers conducted a research on a small scale, measuring needs, literature, and other considerations in terms of value.

- 2) Planning

During this stage, researchers compiled a research plan that includes objectives to be achieved, the abilities required in the conduct of research, research design, and the possibility of testing in a limited scope.

- 3) Develop preliminary form of product

Development of learning materials, learning process, and evaluation instruments.

- 4) Preliminary field testing

Field tests in 1 to 3 schools with 6 to 12 test subjects. During the tests held interviews and distribution of questionnaires.

5) Main product revision

At this stage the researchers do repairs or improvements preliminary field trial results.

6) Main field testing

Doing the wider test at 5 to 15 schools with 30 to 100 test subjects. Data collected when the test was then evaluated and if possible comparison groups.

7) Operational product revision

Improve and complete the product further field test results.

8) Operational field testing

The test is conducted at 10 to 30 schools, involving 40 to 200 subjects. Tests conducted through questionnaires, interviews, and observation and analysis of the results.

9) Final product revision

Completion based on input and advice from the operational field testing.

10) Dissemination and implementation

Reported the results of research in a forum and published in the journal, in cooperation with the publisher to publish the results of research, and monitoring of distribution for quality control.



## B. Relevant Researchs

Research about the development of computer-based learning media, especially Interactive Learning Module have been widely performed, studied, and researched. Although these studies did not all come from the same area of expertise, but the results of this research can be used as a comparison or a development of the research conducted.

1. Emiasih (2014) in her research entitled *“Pengembangan Media Pembelajaran Akuntansi Modul Interaktif Berbasis Adobe Flash Kompetensi Dasar Membuat Jurnal Penyesuaian Untuk Meningkatkan Motivasi Belajar Siswa Kelas X Akuntansi 2 SMK Negeri 1 Pengasih”*. From the test results can be seen that with the existing indicators show the ratings by subject matter experts got an average rating of 4.37 with the category of "Very Feasible", media experts got an average rating of 3.95 with the category of "Feasible", practitioners of accounting learning got an average rating of 4.29 with the category of "Very Feasible", and students' opinions of 4.31 with the category of "Very Feasible". Furthermore adobe flash-based interactive modules can increase the motivation of class X student of Accounting SMK Negeri 1 Pengasih. Proven with increase before and after using adobe flash-based interactive modules of 2.68 category "Medium" into the 3.58 category of "Very High". The similarity of the research conducted by Emiasih (2014) with this research is the development of media in the form of interactive modules to improve students' motivation. The

differences are in learning materials, research place, and the software used.

2. Helna Satriawati (2015) in her research entitled "*Pengembangan E-Modul Interaktif Sebagai Sumber Belajar Elektronika Dasar Kelas X SMK N 3 Yogyakarta*". Research result shows that: (1) the feasibility of interactive e-module in terms of media, including the category of very feasible with a mean score of 67.00 out of a maximum score of 80.00 with frequency distribution feasible and very feasible each of 50%. The component materials including categorized as very feasible with a mean score of 150.5 out of a maximum score of 160.00 with a very feasible percentage of 100%, including the learning process feasible category with mean score of 88.12 out of a maximum score of 120.00 with the spread of the frequency distribution of 7.69%, says Moderately Feasible, 76.92% Feasible, and 15.38% Very Feasible, (2) Performance of interactive e-module from the aspect of appearance/layout, including feasible category with a mean score of 23.35 out of a maximum score of 32.00. The similarity of the research conducted by Helna Satriawati (2015) with this research is the development of media in the form of interactive modules using Lectora Inspire Software. The differences are in the variables of the research, learning materials, and research place.
3. Dian Permatasari (2014) in her research entitled "*Pengembangan Modul Interaktif Dengan Menggunakan Software Lectora Inspire*

*Pada Materi Transformasi Untuk Siswa SMP Kelas VII*'. The results obtained are: (1) the quality of interactive modules on the material transformation of junior high school students of class VII were developed based on the aspect of validity, practicality, and effectiveness, found that (a) interactive modules declared valid based on the results of expert validation and evaluation of teachers by acquiring the average score of 4.08 and 4.57 are included in the criteria very well; (b) interactive modules declared practical based on the questionnaire responses of students with obtain a very positive response from the students of 88.00%; and (c) interactive modules declared effective based on achievement test results with the percentage of students who completed of 62.5% which is included in the criteria well. The similarity of the research conducted by Dian Permatasari (2014) with this research is the development of media in the form of interactive modules using Lectora Inspire Software. The differences are in the variables of the research, learning materials, and research place.

### **C. Framework**

Technological development continues to encourage progress in the field of education. Learning using technology-based media can be easier to achieve the learning objectives. In this case, the learning media is useful for stimulating learning. Excitement in learning is closely associated with

learning motivation. Motivation is a very important aspect for students, without their motivation the student may not have the willingness to learn.

SMK Negeri 1 Yogyakarta has provided computer laboratory as places practice of the students, including the practice of Computer Accounting. However, there are infrastructure facilities in schools have not been fully utilized optimally by teachers to make learning media that stimulate student motivation. The learning media used is still struggling on textbooks and slide presentation. Utilization of varied learning media can assist teachers in improving the quality of learning. Making computer-based interactive learning module can support students and teachers in the learning process. Development of learning media in the form of interactive module using Lectora Inspire Software also expected to increase students' motivation.

This research use research and development method (R & D) that is used to produce a particular product in the form of interactive learning module by utilizing Lectora Inspire Software. To determine the success of learning media prepared to comply with the specified standards, need to be validated and then tested. Validation is intended to obtain feedback/correction on products developed from material expert, media expert, and accounting teacher. Field trials on the student intended to determine the feasibility of the products developed and to know the increase in student motivation after using learning media in the form of Interactive Learning Module for Computer Accounting Subject.

#### D. Research Paradigm

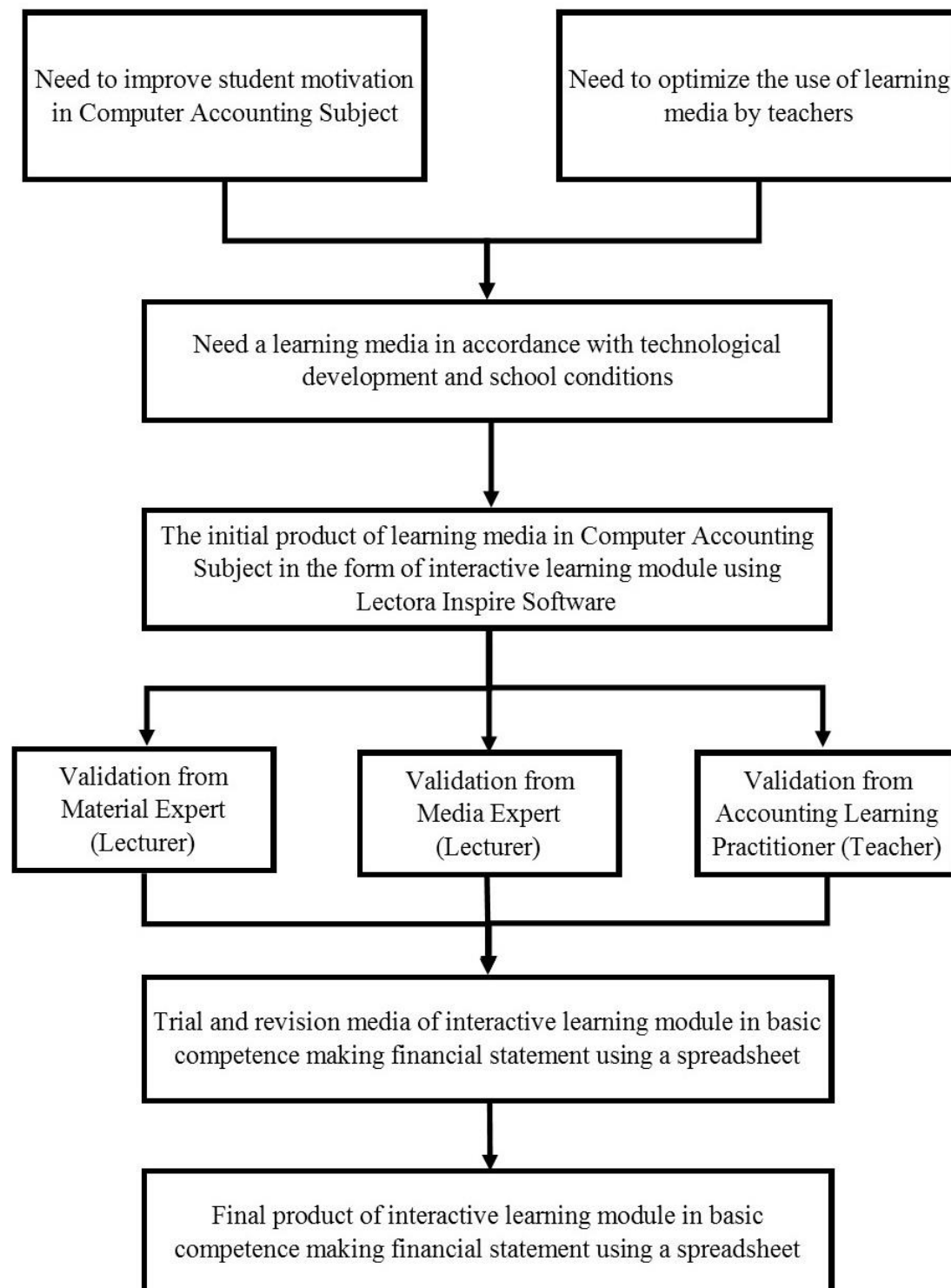


Figure 2. R and D Paradigm of Interactive Learning Module

## **E. Research Questions**

Based on the problems and theoretical review that have been mentioned, the research question can be formulated as follows:

1. How are technical steps to develop the Interactive Learning Module in basic competence making financial statements using a spreadsheet?
2. How is the feasibility learning media based on material expert judgment of Interactive Learning Module in basic competence making financial statements using a spreadsheet?
3. How is the feasibility learning media based on media expert judgment of Interactive Learning Module in basic competence making financial statements using a spreadsheet?
4. How is the feasibility learning media based on accounting teacher judgment of Interactive Learning Module in basic competence making financial statements using a spreadsheet?
5. How is the students' response of class XI AK 2 in SMK Negeri 1 Yogyakarta of Interactive Learning Module in basic competence making financial statements using a spreadsheet?
6. How is the improvement of student motivation of class XI AK 1 in SMK Negeri 1 Yogyakarta after using interactive learning module in basic competence making financial statement using a spreadsheet?

## **CHAPTER III RESEARCH METHOD**

### **A. Types of Research**

This research used methods of research and development (R & D). According to Sugiyono (2015: 407), methods of research and development is the research methods used to produce a specific product and test the effectiveness or feasibility of such products. According to Sukmadinata (2009: 164), research and development is a process or steps to develop a new product or improve existing products, which can be accounted for. Products are not always shaped objects or hardware, such as books, module, learning tools in the classroom or in the laboratory, but it can also software, such as computer programs for data processing, learning in the classroom, library or laboratory, or models of education, learning, training, evaluation, management, and so on.

This research aimed to develop learning media for computer accounting subjects in the form of interactive module using Lectora Inspire Software through systematic steps and tested feasibility in terms of material and media as well as attractive to students. This research used ADDIE model, developed by Dick and Carey (1996) i.e. a development model that consists of five stages which include Analysis, Design, Development, Implementation, and Evaluation that has been modified to produce a simple development model for research beginners. Researcher used ADDIE models because this model has evaluation stage to evaluate the objective of the product (improve student motivation).

## **B. Place and Time Research**

This research was conducted in SMK Negeri 1 Yogyakarta which is located at Jalan Kemetiran Kidul, Pringgokusuman, Gedong Tengen, Yogyakarta. This research has been carried out in July 2016 until November 2016.

## **C. Subject and Object Research**

The subject of research (the subject product trials) involved were one media expert (Lecturer in Education Technology UNY), one material expert (Lecturer in Accounting Education UNY), accounting learning practitioners (Accounting Teacher in SMK Negeri 1 Yogyakarta), and students of XI AK in SMK Negeri 1 Yogyakarta. Meanwhile, the object of research was feasibility learning media in the form of interactive module using Lectora Inspire Software and student motivation improvement after used these media.

## **D. Research and Development Procedure**

The procedure of this research adapted ADDIE development model that consists of five stages, i.e. analysis, design, development, implementation, and evaluation. Development procedure of interactive module using Lectora Inspire Software in accordance with the adaptation of ADDIE development model are as follows:

### **1. Analysis Stage**

At this stage has been determined for the purpose of the product development in the form of interactive module in Computer



Accounting Subject. The purpose was to make learning more fun and make students understand the concept of computer accounting easier independently. Interactive module selected as the media developed in this research because interactive module is the module in the form of software that is easy to use and has animations and video tutorials, so it could encourage students to learn independently.

Besides that, the developer conducted an analysis of the syllabus accounting subjects, especially computer accounting material in Odd Semester (First Semester) for class XI Accounting student of SMK Negeri 1 Yogyakarta. This analysis was conducted to identify and define basic competencies and the number of indicators developed in the basic competence.

## **2. Design Stage**

Based on the analysis, the researcher was conducted stage of design products which include:

- a. Making learning scenarios that explain the description of the material that would be displayed and an overview of student activity.
- b. Making flowchart that describe a path or a media work processes.
- c. Preparation of the overall product design (storyboard) so it can be seen the relationship of each product section and explained the layout (appearance) of interactive module that is equipped with an explanation of the existing view.

- d. Collection of design objects such as text material, questions and answers in accordance with the design of interactive modules, making video tutorials, animation creation, and collection of background, pictures, sound effects, music, layout, and buttons that would be processed in Lectora Inspire Software.
- e. Arrange the assessment instrument that used to assess the product. The assessment instruments are questionnaires intended to material expert, media expert, accounting learning practitioner, and students as the target implementation product.
- f. Arrange the learning motivation instrument that used to measure students' learning motivation before and after use of the Interactive Learning Module and then test the instrument with validity and reliability test.

### **3. Development Stage**

At this development stage, the researcher was developed based on the design of interactive module that has been designed at the design stage. In this development stage performed:

#### **a. Making Products**

Making the product based on the design of a product that has been designed. Making the products in the form of interactive module using Software Lectora Inspire. All the components which have been prepared in the design stage arranged into a single complete product.

b. Product Validation I

The initial product was validated by one material expert and one media expert. The results of the validation such suggestions, comments, and feedback used as a basis to revise the first for products developed before tested. Validation is done by filling the questionnaire validation material expert and media experts.

c. Product Revision I

The product revised based on feedback and suggestions by material expert and media expert.

d. Product Validation II

The product validated by accounting teacher at SMK Negeri 1 Yogyakarta using a questionnaire instruments that has been developed in the previous stage.

e. Product revision II

The product revised based on feedback and suggestions provided by accounting learning practitioner. Products revised at this stage then used at the implementation stage to the students as the target use of the product.

#### **4. Implementation Stage**

At the implementation stage, the activities included:

a. Field Trying Out

In this research the products tested to the student of class XI AK 2 SMK Negeri 1 Yogyakarta amounted to 32 students.

- b. See the students' response.

At this stage has been distributed students' response questionnaire about the media developed. Students' response questionnaire distributed after the product has been tested to students.

- c. If necessary revised stage III based on feedback and suggestions from students, but in this revision still consider feedbacks and suggestions of the previous validator so that does not contradict with previous corrections.

## **5. Evaluation Stage**

At this stage, the activities included:

- a. Analyzing data from the product validation.

Analyzing data obtained from the results of the validation of the product feasibility by material expert, media expert, and accounting learning practitioner.

- b. Analyzing data from the student.

Analyzing data obtained from the students to know the students' response to the media.

- c. Final product

At this stage obtained the final product in the form of interactive module using Lectora Inspire Software after validation and revision in the previous stage.

d. Measurement student learning motivation.

The final product implemented in the learning process in class XI AK 1 to know the improvement of students' learning motivation. Measurement the learning motivation is using motivation questionnaire before and after use of media based on the experimental design.

According to Sugiyono (2015: 107), experimental research method can be interpreted as the research methods used to find a specific treatment effect to another in controlled conditions. This research used an experimental method to determine the improvement in student motivation after being given treatment such as the use of media. The experimental design used was the One-Group Pretest-Posttest Design. There is a group who are given pretest before treatment, then given a posttest after treatment. Thus it can be compared to the situation before and after treatment (Sugiyono, 2015: 110). The treatment here means the use of media in the form of interactive learning module. The treated group is 32 students of class XI AK 1 at SMK Negeri 1 Yogyakarta. Pretest and posttest in this research were the students' motivation questionnaire. Questionnaire before and after use of the media was the same questionnaire that has same item question. It was intended that indicators measure the same and accurate measurement results.

### **E. Types of Data**

Data collected in this research includes qualitative and quantitative data, namely:

1. Qualitative data was data about the development process of learning media such as criticism and advice from material expert, media expert, and accounting learning practitioner.
2. Quantitative data was data fundamental in research about validation media from material expert, media expert, accounting learning practitioner, students' responses data about the products that have been developed, and data about the improvement of the students' learning motivation.

### **F. Data Collection Techniques**

Data collection techniques in this research were using questionnaires. The questionnaire is a data collection technique is done by giving a set of questions or a written statement to the respondent (Sugiyono, 2015: 199). Questionnaire on this development research used to obtain data from media expert, material expert, accounting learning practitioner, and students to evaluate the learning media that was developed.

There were three kinds of questionnaires, namely validation questionnaire, students' response questionnaire, and students' motivation questionnaire. Validation questionnaires filled by material expert, media expert, and accounting teacher. Students' response questionnaire filled by students to know their feedback and suggestions about the feasibility of

Interactive Learning Module. While students' motivation questionnaire used to measure the motivation improvement.

### G. Research Instrument

The instrument used to collect data was questionnaire (nontest instrument). The feasibility questionnaire used to measure the feasibility of Interactive Learning Module based on the material, language, learning design, software engineering, and visual communication aspects. The questionnaire filled by material expert, media expert, accounting teacher, and students. Those four questionnaires used mixed question because there were closed questions and opened questions. Respondents choose the provided answer and write the answer in narrative form. Questionnaires arranged by using Likert Scale (a scale of 5). The provided answer options are: 5 (Very Good), 4 (Good), 3 (Enough), 2 (Bad), 1 (Very Bad). The grating poll of this instrument are as follows:

#### 1. Questionnaire for Material Expert

Table 1. Grating Questionnaire for Material Expert

No	Aspects	Indicators	Item Number
1	Material	Materials' suitability with Basic Competence and indicators	1, 2
		The accuracy of the concepts	3
		Completeness of the material	4, 5
		Concepts and definitions presented does not cause many interpretations	6
		Clarity of the material	7
		Systematic and logic flow	8, 9
		Clarity examples	10
		Clarity formulation of the questions	11

No	Aspects	Indicators	Item Number
		Completeness of the questions	12, 13, 14, 15
		Conformity with the answer key questions	16, 17
2	Language	The suitability of the terms used	18
		Spelling and punctuation	19, 20
3	Learning Design	The formulation of operational learning objectives	21
		Clarity of learning instructions	22
		There are cognitive, affective, and psychomotor aspects	23, 24, 25
		Present exercises (case study) for the understanding of the concept	26

Source: Wahono (2006) by modification

## 2. Questionnaire for Media Expert

Table 2. Grating Questionnaire for Media Expert

No	Aspects	Indicators	Item Number
1	Software Engineering	The effectiveness and efficiency of resource use	1, 2
		Reliability media	3
		Usability media	4
		Compatibility media	5, 6
		Packaged integrated	7
		Completeness of documentation	8
2	Visual Communication	Communicative	9
		Creative and innovative	10, 11
		Audio	12
		Transition	13
		Visual	14, 15, 16, 17
		Layout	18
		Font	19
		Navigation icon	20, 21
		Video	22

Source: Wahono (2006) by modification



## 3. Questionnaire for Teacher

Table 3. Grating Questionnaire for Teacher

No	Aspects	Indicators	Item Number
1	Material	Materials' suitability with Basic Competence and indicators	1, 2
		Completeness of the material	3, 4, 5
		Systematic and logic flow	6
		Clarity examples	7
		Clarity formulation of the questions	8
		Completeness of the questions	9
		Clarity questions and answer key	10
2	Language	The suitability of the terms used	11
		Spelling and punctuation	12
3	Learning Design	The formulation of operational learning objectives	13
		Clarity of learning instructions	14
		There are cognitive, affective, and psychomotor aspects	15, 16, 17
		Present exercises (case study) for the understanding of the concept	18
4	Software Engineering	Reliability media	19
		Packaged integrated	20
		Completeness of documentation	21
5	Visual Communication	Creative and innovative	22
		Audio	23
		Visual	24, 25
		Layout	26
		Navigation icon	27
		Video	28

Source: Wahono (2006) by modification

#### 4. Questionnaire for Student

Table 4. Grating Questionnaire for Student

No	Aspects	Indicators	Item Number
1	Material	Clarity of the material presented	1
		Systematic and logic flow	2
		Clarity examples	3
		Clarity formulation of the questions	4
2	Language	Language communication	5
3	Learning Design	Interactivity	6
		Providing learning motivation	7
		Giving understanding	8
		Encourage students to learn independently	9
4	Software Engineering	Reliability media	10
		Packaged integrated	11
		Completeness of documentation	12
5	Visual Communication	Audio	13
		Visual	14, 15
		Layout	16
		Navigation icon	17
		Video	18

Source: Wahono (2006) by modification

The students' learning motivation questionnaires were given to students before and after the use of Interactive Learning Module. The questionnaire used closed question, so the questionnaire has been provided answers and respondents simply choose the answer. Questionnaires arranged by using a Likert Scale (1-5). The provided answer options are: SA (Strongly Agree), A (Agree), LA (Less Agree), D (Disagree), SD (Strongly Disagree). The grating poll of this instrument is as follows:

Table 5. Grating Questionnaire Student Motivation

No.	Indicators	Item Number
1	There is a passion and desire to succeed	1, 2*, 3, 4, 5*
2	The drive and the need to learn	6, 7*, 8, 9, 10
3	There is hope and ideals of the future	11, 12*, 13, 14
4	There is award in learning	15, 16*, 17, 18
5	The interest activity in learning	19, 20*, 21, 22
6	There is a conducive learning environment	23, 24, 25*, 26

Note: \* negative statement

Source: Uno (2015: 23)

## H. Validity and Reliability of Instruments

Before the questionnaire used to collect data from research subjects, first it would be tested intended to obtain valid and reliable instrument. Instruments trials conducted in SMK Negeri 1 Yogyakarta. The trials conducted on 30 students of class XI AK 2. The instrument in question was the learning motivation questionnaire before and after the use of interactive modules. These instruments trials conducted to determine whether the instruments are arranged is really a good instrument. Good instrument must meet two requirements, namely valid and reliable.

### 1. Validity

Validity is a measure that indicates the levels of validity of an instrument. An instrument is valid if it is able to measure what is desirable and can express the data of the variables studied accurately. Calculated the validity of the questionnaire using the Spearman Rank because the data obtained were ordinal data (Sugiyono, 2012: 245) as follows:

$$\rho = 1 - \frac{6 \sum b_i^2}{n(n^2 - 1)}$$

Description:

$\rho$  = Spearman Rank correlation coefficient

$b_i$  = the difference between the two paired observations

$n$  = total observation

Value of  $\rho_{\text{count}}$  consulted with  $\rho_{\text{table}}$  at a significance level of 5%.

If the value of  $\rho_{\text{count}}$  was greater than or equal to 5%  $\rho_{\text{table}}$  the item of the instrument in question was valid and if known the value  $\rho_{\text{count}}$  was smaller than  $\rho_{\text{table}}$  the instrument was invalid.

The research instrument test conducted with 30 students outside the sample (student of XI AK 2). This test was done to know whether each item of the questionnaire was valid or not. The validity result of the questionnaire is as follows (data processing result can be seen in Appendix 2.f. Page 214):

Table 6. Validity Interpretation of Learning Motivation Questionnaire

Item Number	$\rho_{\text{count}}$	$\rho_{\text{table}}$ (Sugiyono, 2012: 387)	Interpretation
1	0,466	0,364	Valid
2	0,628	0,364	Valid
3	0,511	0,364	Valid
4	0,514	0,364	Valid
5	0,413	0,364	Valid
6	0,285	0,364	Invalid
7	0,194	0,364	Invalid
8	0,233	0,364	Invalid
9	0,464	0,364	Valid
10	0,049	0,364	Invalid
11	0,122	0,364	Invalid
12	0,434	0,364	Valid
13	0,394	0,364	Valid
14	0,468	0,364	Valid
15	0,178	0,364	Invalid
16	0,528	0,364	Valid
17	0,642	0,364	Valid
18	0,259	0,364	Invalid

Item Number	$\rho$ count	$\rho$ table (Sugiyono, 2012: 387)	Interpretation
19	0,035	0,364	Invalid
20	0,540	0,364	Valid
21	0,516	0,364	Valid
22	0,323	0,364	Invalid
23	0,235	0,364	Invalid
24	0,401	0,364	Valid
25	0,608	0,364	Valid
26	0,425	0,364	Valid

Source: Data Processing Result

Based on the table above, it's shown that there were 16 items of the statement that the result is valid.

Table 7. Validity Analysis of Learning Motivation Questionnaire

No.	Criteria	Number of Item	Item Number	Percentage
1.	Valid	1, 2, 3, 4, 5, 9, 12, 13, 14, 16, 17, 20, 21, 24, 25, 26	16	62%
2.	Invalid	6, 7, 8, 10, 11, 15, 18, 19, 22, 23	10	38%
Total			26	100%

## 2. Reliability

The second requirement of a good instrument is to be reliable. Reliability refers to the definition that an instrument is credible as to be used as a data collection tool because the instrument is good (Arikunto, 2013: 221). An instrument is said reliable if when it is used to measure the same phenomenon in different time will show the same results.

To test the reliability of instruments used Alpha formula, because the questionnaire has no answer that is false or zero. This was consistent with what was presented by Arikunto (2013: 239) that the Alpha formula used to find the instrument reliability scores instead of

1 and 0, for example, a questionnaire or subjective test. Alpha formula is as follows:

$$r_{11} = \left( \frac{k}{(k-1)} \right) \left( 1 - \frac{\sum \sigma_b^2}{\sigma_t^2} \right)$$

Description:

$r_{11}$  = instrument reliability  
 $k$  = the number of the questions  
 $\sum \sigma_b^2$  = the number of variance item  
 $\sigma_t^2$  = total variance

Furthermore, the calculation results interpreted with tables provide guidelines for the interpretation of the correlation coefficient. Here is the guidelines table:

Table 8. Guidelines for Providing Interpretation with Correlation Coefficient

Interval Coefficient	Interpretation
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Enough
0,60 – 0,799	Strong
0,80 – 1,000	Very Strong

Source: Sugiyono (2015: 257)

Based on this research, instrument reliability test shown the score  $0,833 > r_{\text{table}} 0,361$ . According to Table 8 above, research instrument had a very strong reliability if the value of coefficient (Cronbach's Alpha)  $\geq 0,80$ . This result shown that instrument was reliable and had a very strong reliability.

## I. Data Analysis Techniques

The collected data analyzed to determine the judgments or opinions of the product and increasing student motivation. Data obtained from the

material expert, media expert, accounting teacher, and students in the form of media feasibility data and improvement student motivation data, as follows:

### 1. Media Feasibility Data

Data were obtained from a questionnaire filled by media expert, material expert, accounting learning practitioners, and students. Then the data were analyzed by following steps:

- a. Transformed qualitative data into quantitative data by provisions:

Table 9. Scoring Rules with Likert Scale

Classification	Score
Very Good	5
Good	4
Enough	3
Bad	2
Very Bad	1

Source: Sugiyono (2015: 135)

- b. Calculated the average score of each aspect using the following formula:

$$\bar{X} = \frac{\sum X}{N}$$

Descriptions:

$\bar{X}$  = average score  
 $\sum X$  = total score  
 $N$  = item field subject

(Sukardjo, 2005: 52)

- c. Interpreted qualitative average value of each aspect and all aspects by using the following criteria:

Table 10. Converting Quantitative Data to Qualitative Data

Score	Interval Score	Category
5	$\bar{X} > \bar{X}_t + 1,8 \text{ SDi}$	Strongly Feasible
4	$\bar{X}_t + 0,6 \text{ SDi} < \bar{X} \leq \bar{X}_t + 1,8 \text{ SDi}$	Feasible
3	$\bar{X}_t - 0,6 \text{ SDi} < \bar{X} \leq \bar{X}_t + 0,6 \text{ SDi}$	Moderately Feasible
2	$\bar{X}_t - 1,8 \text{ SDi} < \bar{X} \leq \bar{X}_t - 0,6 \text{ SDi}$	Unfeasible
1	$\bar{X} \leq \bar{X}_t - 1,8 \text{ SDi}$	Strongly Unfeasible

Description:

$\bar{X}$  = actual score (score obtained)

$\bar{X}_t$  = ideal mean

=  $1/2$  (ideal maximal score + ideal minimal score)

SDi = ideal standar deviation

=  $1/6$  (ideal maximal score - ideal minimal score)

(Sukardjo, 2005: 53)

Based on a conversion table above, obtained feasibility standards interactive learning module on every aspect on average with the following details:

- 1) Feasibility of Interactive Learning Module developed declared as Strongly Feasible if the average score obtained in the range of 4.21 up to 5.00.
- 2) Feasibility of Interactive Learning Module developed declared as Feasible if the average score obtained in the range of 3.41 up to 4.20.
- 3) Feasibility of Interactive Learning Module developed declared as Moderately Feasible if the average score obtained in the range of 2.61 up to 3.40.



- 4) Feasibility of Interactive Learning module developed declared as Unfeasible if the average score obtained in the range of 1.81 up to 2.60.
- 5) Feasibility of Interactive Learning Module developed declared as Strongly Unfeasible if the average score obtained in the range of less than or equal to 1.80.

## 2. Improvement Student Motivation Data

Data filled by students before and after using learning media in the form of interactive module using Lectora Inspire Software. Then data analyzed by following steps:

- a. Analyzed quantitative data scores descriptively with a conversion table values as follows:

Table 11. Criteria Scoring Items on the Motivation Questionnaire

Criteria	Score	
	Positive	Negative
Strongly Agree	5	1
Agree	4	2
Less Agree	3	3
Disagree	2	4
Strongly Disagree	1	5

Source: Sugiyono (2015: 135)

- b. Calculated the scores for each aspect of motivation.
- c. Calculated the scores of the student motivation every aspect with formula:

$$\% \text{ motivation score} = \frac{\text{motivation score}}{\text{maximal score motivation}} \times 100\%$$

Improvement learning motivation occurs when the final motivation score was greater than the initial motivation score. Then tested with t test using paired sample formula. Researcher used paired sample formula because the grup (sample) was same i.e. students of class XI AK 1. The calculation was value of empirical t matched with  $t_{table}$  at a significance level of 5%. If empirical t is greater than  $t_{table}$ , so there is a significant difference.

$$t = \frac{\bar{D}}{\left(\frac{SD}{\sqrt{N}}\right)}$$

Description:

$\bar{D}$  = the average margin of 2 scores  
 SD = the standard deviation of the price D  
 N = total pairs

(Danapriatna & Setiawan, 2005: 108-110)

## **CHAPTER IV**

### **RESEARCH RESULT AND DISCUSSION**

#### **A. Research Description**

##### **1. Description of Research Subject**

The subject of this research trial is a class XI AK 1, there are 32 students. The next subject is one Material Expert, one Media Expert, and one Accounting Learning Practitioners (Accounting Teacher). Here is the list of research subject:

Table 12. List of Research Subject

No.	Subject	Name
1.	Material Expert	Rizqi Ilyasa Aghni, M.Pd.
2.	Media Expert	Estu Miyarso, M.Pd.
3.	Accounting Teacher	Marsono, S.Pd.
4.	Accounting Students	a. 32 student of XI AK 2 in SMK Negeri 1 Yogyakarta as the field try out student. b. 32 student of XI AK 1 in SMK Negeri 1 Yogyakarta as the object implementation research (measurement learning motivation)

##### **2. Description of Place and Time Research**

The research was conducted at SMK Negeri 1 Yogyakarta is located in Jalan Kemetiran Kidul, Pringgokusuman, Gedong Tengen, Yogyakarta. The research was conducted in August 2016 until November 2016 as well as the reporting phase was conducted in November 2016 until December 2016. Research and development procedure consist of following stages:

Table 13. Time Schedule of Research and Development

No	Development Procedures	Activity	Time
1	Analysis	a. Curriculum Analysis b. Subject Analysis c. Purpose Formulation	July 2016
2	Design	a. Material Arrangement b. Flowchart Media c. Story Board d. Lesson Plans e. Making Questionnaire and Test the Learning Motivation Instrument (Validity and Reliability Test)	September 2016
3	Development	a. Making Interactive Learning Module b. Expert Validation c. Product Revision I d. Accounting Teacher Validation e. Product Revision II	October-November 2016
4	Implementation	a. Field Trying Out b. See Students' Response	November 2016
5	Evaluation	Measurement Learning Motivation	November 2016

## B. Results of Research and Development

The implementation of development research was conducted by five stages of the ADDIE Model with the following details:

### 1. Analysis Stage

At this stage, researchers analyzed the problems and needs of students with observation at SMK Negeri 1 Yogyakarta. Observations made during researchers conducted *Praktik Pengalaman Lapangan* (PPL) in July 2016. Researchers have observed learning undertaken by Computer Accounting Teacher in class XI Accounting. In addition, the

researchers also looked at the availability of school facilities to support teaching and learning process.

Observations in the classroom held on July 25, 2016 in class XI AK 1 on the subjects of Computer Accounting Spreadsheet. Learning begins by teachers with greetings, praying, and condition students to be ready to learn. Learning process takes place in the Computer Laboratory, so that each student has a computer for practice. During the learning takes place, teachers utilize the computer and LCD projector to display the program Microsoft Excel (spreadsheet). In addition, students also using textbooks to read the course material. Instructional media used by teachers have not varied and monotonous.

When the teacher explains the materials, seen some students are drowsy, chatting with friends, and do not pay attention to the teacher's explanation. When the teacher demonstrated the steps of accounting with spreadsheets, some students can't follow because the explanation is too fast and the projected display is less clear to students that his seat in the back.

Researchers also conducted interviews with students after the lesson is completed. From the interviews, it can be seen that the students find it difficult to follow the steps taught by the teacher. In addition, students feel lazy to do about the practice because of the absence of exciting learning resources and limited only textbooks. Students prefer learning media is more interesting and interactive.

Based on learning motivation indicators used are the activities that interest in learning as the learning media interest, it can be concluded that students of class XI AK 1 have low motivation to learn, so it needs to be improved.

The next observation is observing the availability of school facilities. Almost every class has had an LCD projector. In addition, the school also has a computer lab that allows adequate to carry out learning activities using the Interactive Learning Module. Based on the analysis of the curriculum, the needs of students and subjects, showed that the basic competencies that can be developed is "Making Financial Statements Using a Spreadsheet".

Based on the results of the analysis, it is necessary to develop media that can increase students' motivation. Media developed is a learning media that can make students do not feel bored, varied, and interesting, so that students' motivation will increase. Also the media created can be easier for students to understand the material. To realize the creation of the media, can be done by developing Interactive Learning Module. Competence published in the media referring to the syllabus in Appendix 1.a. Page 119.

## **2. Design Stage**

At this stage, the researchers gathered information that supports the development of Interactive Learning Module. Some information from the analysis prepared by the researcher thus producing:

a. The Interactive Learning Module Design

Researchers must first create a flow chart that can be seen in Appendix 1.d. Page 145. Then the researchers designed an interactive learning module in the form of a storyboard which can be seen in Appendix 1.e. Page 148. Competencies used in Interactive Learning Module obtained from the syllabus used in SMK Negeri 1 Yogyakarta, namely the Basic Competence Making Financial Statements Using Spreadsheet. Researchers collect books that can be used as reference material preparation of the module. Interactive Learning Module is designed with an attractive appearance and easily understood language. It contains material, video tutorials, and exercises. Here is the design of products Interactive Learning Module:

Table 14. Interactive Learning Module Design

No	Design	Description
1	Form	Soft file extension *.exe
2	Learning Material	Basic Competence Making Financial Statement Using Spreadsheet
3	Language	Indonesia
4	Section	a. <i>Petunjuk</i> b. <i>Kompetensi</i> c. <i>Materi</i> d. <i>Uji Kompetensi</i> e. <i>Pustaka</i> f. <i>Profil</i>
5	Function	Independent learning media which can be operated with a computer or laptop

Generally, the parts of the Interactive Learning Modules can be explained as follows:

1) *Petunjuk* Section

- a) *Petunjuk Umum*, overview interactive learning modules and the material prerequisites.
- b) *Spesifikasi Komputer*, description of computer specification that must be present for interactive learning module can be operated properly.

2) *Kompetensi* Section

Contains competencies that must be mastered by students, including: Competency Standards, Basic Competency, Indicators, and Learning Objectives.

3) *Materi* Section

- a) *Pendahuluan*, contain the scope of the material covered in the module.
- b) *Studi Kasus*, are examples of questions that will be discussed in the module.
- c) *Materi*, contains short material to provide knowledge to students.
- d) *Video Tutorial*, contains steps to work case studies that can clarify the matter.

4) *Uji Kompetensi* Section

- a) *Petunjuk*, contains a guideline for doing Competency Test.



b) *Soal*, contains three types of questions, there are:

*Mengurutkan, Benar Salah, and Pilihan Ganda.*

c) *Hasil*, contain scores obtained by students after doing Competency Test.

d) *Studi Kasus*, contains about case study accounting cycle services company that can be done by students as an exercise.

#### 5) *Pustaka* Section

Contains a list of reference books that are used to compile the module.

#### 6) *Profil* Section

Contain the identity of the developer or researcher and supervisor.

### b. Composition of Material and Question

The compositions of the material in the Interactive Learning Modules are presented in the following table:

Table 15. Composition of Material in Basic Competence Making Financial Statement

No	Material	Sub Material
1	Making Accounting Cycle of Services Company	a. Creating Account List 1) Summary of the material 2) Video Tutorial #1 b. Creating Beginning Balance 1) Summary of the material 1) Video Tutorial #2 c. Creating General Journal 1) Summary of the material 2) Video Tutorial #3 d. Creating General ledger 1) Summary of the material

No	Material	Sub Material
		2) Video Tutorial #4 e. Creating Trial Balance 1) Summary of the material 2) Video Tutorial #5 f. Creating Adjustment Journal 1) Summary of the material 2) Video Tutorial #6 g. Creating Work Sheet 1) Summary of the material 2) Video Tutorial #7 Column 1 3) Video Tutorial #7 Column 2 4) Video Tutorial #7 Column 3 5) Video Tutorial #7 Column 4 6) Video Tutorial #7 Column 5 h. Creating Financial Statements 1) Summary of the material 2) Video Tutorial #8
2	Print Financial Statements	a. Summary of the material b. Video Tutorial #9
3	Making Graph	a. Summary of the material b. Video Tutorial #10

Material, questions, and answer keys contained in this module was compiled from a wide variety of literature sources or references. Material, questions, and answer keys are combined with Microsoft Word and then copied into the modules made. The material, questions and answer keys can be seen in Appendix 1.c. Page 127.

c. Lesson Plans (RPP)

Researcher designed RPP as a guide for implementing learning media in the classroom. RPP created and consulted with accounting teacher. RPP can be found in Appendix 1.b. Page 122.

### **3. Development Stage**

#### **a. Making Interactive Learning Module**

In the development of interactive module, components such as design background, pictures, video tutorials, material, questions, answer keys and navigation buttons were made and then prepared using Lectora Inspire software in accordance with the draft that has been made in the previous stage. After everything is finished, then saved into .awt format, that format file can still be edited for purposes of revision. The end result of the development is that published offline files with the .exe format that can be run on a computer or laptop without installing Lectora program first.

#### **b. Product Validation I**

##### **1) Product Validation by Material Expert**

Material expert who validates this media is Mr. Rizqi Ilyasa Aghni, M.Pd. from the Faculty of Economics UNY. Validation is done related to material aspects, language, and learning design of Interactive Learning Modules developed with the filling of 1-5 scale questionnaire. Recapitulation of validation media by material expert can be seen in Appendix 3.b. Page 221. Additionally, material expert also provide comments and suggestions to improve the media. In summary, recapitulation of the value presented in the following table:

Tabel 16. Result of Validation Media by Material Expert

No	Feasibility Aspect	Score	Average	Category
1	Material	75	4,41	Strongly Feasible
2	Language	13	4,33	Strongly Feasible
3	Learning Design	24	4	Feasible
<b>Total</b>		<b>112</b>	<b>4,25</b>	<b>Strongly Feasible</b>

According to Table 10, about the conversion of quantitative data into qualitative data, it is known that the average score (X) 4.25 lies in the range of  $4.20 > X < 5$ , which means that the products developed in the category "Strongly Feasible". The results of the validation by material expert indicate that Interactive Learning Module that was developed based on assessment material aspects, language, and learning design is strongly feasible tested based on advice and comments from material expert.

## 2) Product Validation by Media Expert

Media expert who validates this media is Mr. Estu Miyarso, M.Pd. from the Faculty of Education UNY. Validation is done related to aspects of software engineering and visual communication of Interactive Learning Module that was developed with the filling of 1-5 scale questionnaire. Recapitulation of media expert validation presented in Appendix 4.c. Page 228. Additionally, media expert also

provide comments and suggestions to improve the media. In summary, recapitulation of the value presented in the following table:

Tabel 17. Result of Validation Media by Media Expert

No	Feasibility Aspect	Score	Average	Category
1	Software Engineering	34	4,25	Strongly Feasible
2	Visual Communication	62	4,43	Strongly Feasible
<b>Total</b>		<b>98</b>	<b>4,34</b>	<b>Strongly Feasible</b>

According to Table 10, about the conversion of quantitative data into qualitative data, it is known that the average score (X) 4.34 lies in the range of  $4.20 > X < 5$ , which means that the products developed in the category "Strongly Feasible". The results of the validation by media experts shows that Interactive Learning Module that was developed based on the evaluation aspects of software engineering and visual communication is strongly feasible tested based on advice and comments from media experts.

#### c. Product Revision I

Revised serves to minimize mistakes and make Interactive Learning Module feasible to use. Revision of the first phase is done after the initial product of Interactive Learning Module validated by material expert and media expert. Here are the things that need to be revised based on advice from the experts:

### 1) Revision from Material Expert

- a) Layout on page preliminary material is less systematic, so it needs to be revised to bullet points more clearly and systematically.

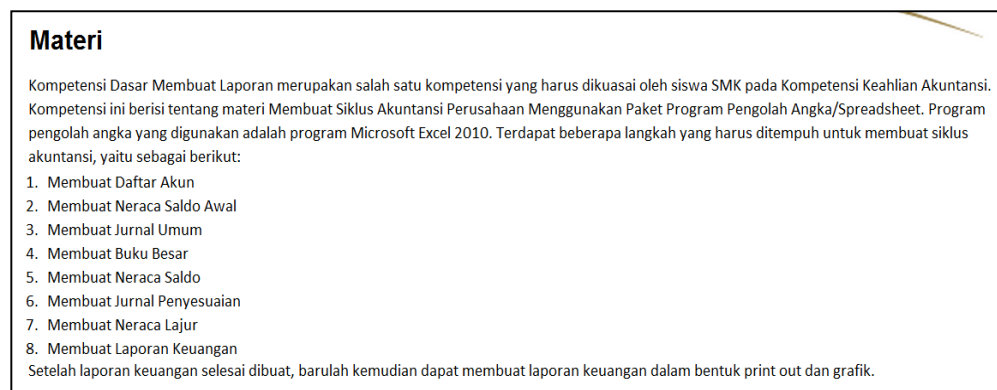


Figure 3. Material Page before Revision

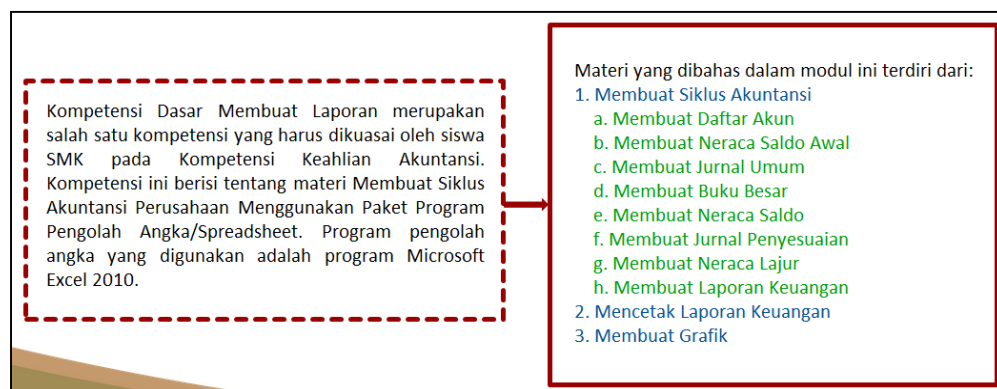


Figure 4. Material Page after Revision

- b) Attachment of the case study CV. MEDIA less neat and many writing errors, so it needs to be revised.

Transaksi yang terjadi selama Bulan Desember 2015 adalah sebagai berikut:	
Tanggal 1,	Diterima pendapatan pemasangan iklan sebesar Rp 15.800.000,00 tunai.
Tanggal 6,	Dibeli perlengkapan secara kredit sebesar Rp 900.000,00.
Tanggal 7,	Dibeli peralatan seharga Rp 6.300.000,00, dari jumlah tersebut dibayar tunai Rp 2.100.000,00 dan sisanya kredit.
Tanggal 10,	Tuan Keenan mengambil uang untuk keperluan pribadinya sebesar Rp 2.000.000,00.
Tanggal 14,	Diterima pendapatan pemasangan iklan sebesar Rp 18.100.000,00 dari jumlah tersebut dibayar tunai Rp 4.100.000,00 dan sisanya kredit.
Tanggal 16,	Perusahaan membayar utang usaha sebesar Rp 1.500.000,00.
Tanggal 20,	Dibayar gaji pegawai sebesar Rp 11.500.000,00.
Tanggal 25,	Membayar biaya bunga pinjaman bank sebesar 8% dari total pinjaman.
Tanggal 27,	Diterima pelunasan piutang dari pelanggan sebesar Rp 6.000.000,00.
Tanggal 30,	Dibayar biaya telepon dan listrik sebesar Rp 400.000,00.
Data penyesuaian pada tanggal 31 Desember 2015 adalah sebagai berikut:	
1.	Biaya penyusutan aktiva tetap perusahaan adalah:
b.	Peralatan Rp 300.000,00.
c.	Kendaraan Rp 500.000,00.
d.	Gedung Rp 1.000.000,00.
5.	Biaya iklan yang terpakai sebesar Rp 800.000,00.
6.	Asuransi dibayar di muka sebesar Rp 18.000.000,00 adalah untuk 2 tahun terhitung mulai tanggal 1 Juli 2015.

Figure 5. Attachment of Case Study CV. MEDIA before Revision

Transaksi yang terjadi selama Bulan Desember 2015 adalah sebagai berikut:	
Tanggal 1	Diterima pendapatan pemasangan iklan sebesar Rp 15.800.000,00 tunai.
Tanggal 3	Dibeli perlengkapan secara kredit sebesar Rp 900.000,00.
Tanggal 7	Dibeli peralatan seharga Rp 6.300.000,00, dari jumlah tersebut dibayar tunai Rp 2.100.000,00 dan sisanya kredit.
Tanggal 10	Tuan Keenan mengambil uang untuk keperluan pribadinya sebesar Rp 2.000.000,00.
Tanggal 14	Diterima pendapatan pemasangan iklan sebesar Rp 18.100.000,00 dari jumlah tersebut dibayar tunai Rp 4.100.000,00 dan sisanya kredit.
Tanggal 16	Perusahaan membayar utang usaha sebesar Rp 1.500.000,00.
Tanggal 20	Dibayar gaji pegawai sebesar Rp 11.500.000,00.
Tanggal 25	Membayar biaya bunga pinjaman bank sebesar 8% dari total pinjaman.
Tanggal 27	Diterima pelunasan piutang dari pelanggan sebesar Rp 6.000.000,00.
Tanggal 30	Dibayar biaya telepon dan listrik sebesar Rp 400.000,00.

Data penyesuaian pada tanggal 31 Desember 2015 adalah sebagai berikut:

1. Biaya penyusutan aktiva tetap perusahaan adalah: a) Peralatan Rp 300.000,00, b) Kendaraan Rp 500.000,00, dan c) Gedung Rp 1.000.000,00.
2. Biaya iklan yang terpakai sebesar Rp 800.000,00.
3. Asuransi dibayar di muka sebesar Rp 18.000.000,00 adalah untuk 2 tahun terhitung mulai tanggal 1 Juli 2015.
4. Perlengkapan yang masih tersisa sebesar Rp 4.200.000,00.
5. Gaji yang masih harus dibayar sebesar Rp 1.000.000,00.

Figure 6. Attachment of Case Study CV. MEDIA after Revision

- c) Correction of pronunciation/audio on the Video Tutorial to adjust to the rules of Indonesian correct. The word or phrase on a Video Tutorial that are fixed are as follows:

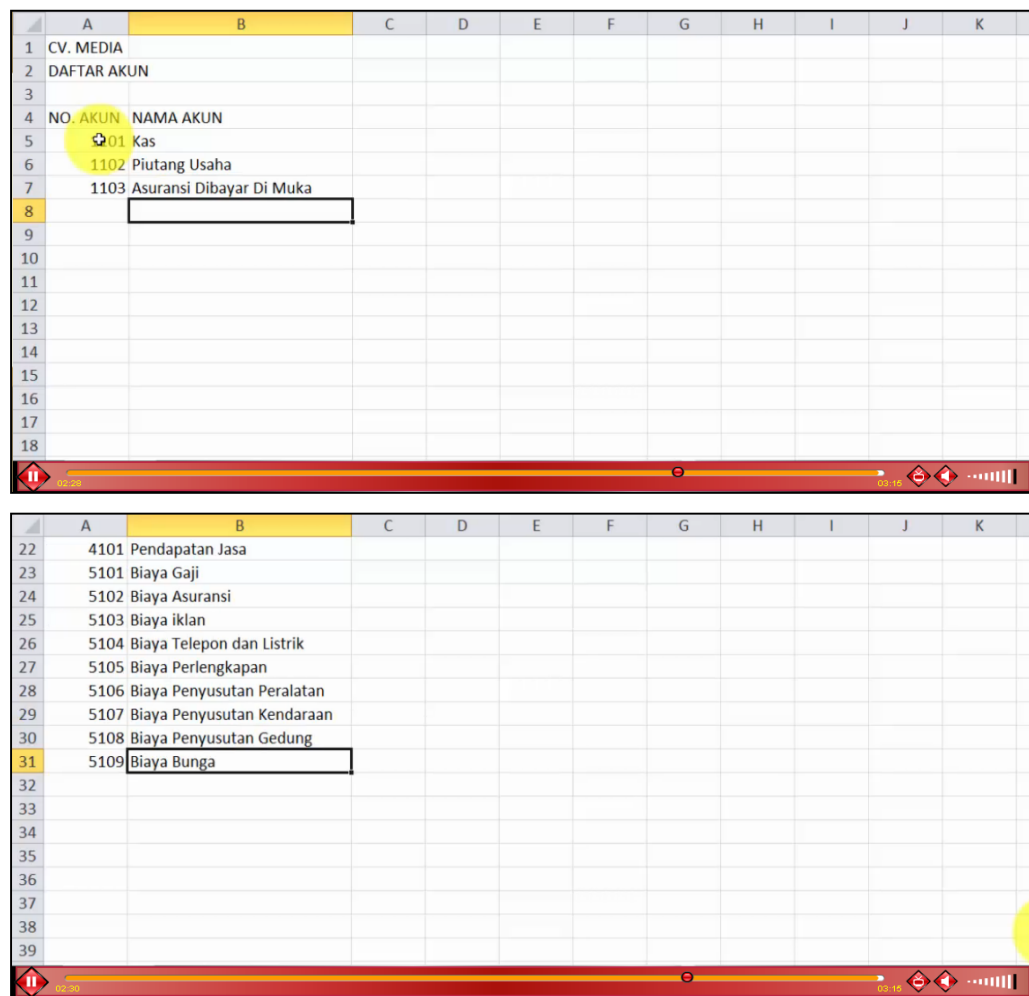
Table 18. Pronouncing Sentence on the Video Tutorials Before and After Revision

No	Errors	Corrections
1	“Kita blok data yang berupa rupiah atau yang berupa uang”	“Kita blok data yang berupa nominal angka pada kolom debet kredit”
2	“Kita ketikkan ini...”	“Kita klik menu...”
3	“Baris kedua dari judul”	“Baris kedua dari kepala kolom atau kepala tabel”

- d) At the beginning or at the end of the grouping account in the ledger suggested by the material expert that accounts described what is involved in each group so that the account be revised on Video Tutorial #4 *Membuat Buku Besar* appropriate material expert advice.
- e) The use of formula on Video Tutorial #8 *Membuat Laporan Keuangan* considered less effective by the material expert so do revision on this part.



- f) On Video Tutorial when the process is complete recommended by the material expert to be given a transition effect, so it is no surprise to those who saw the video.



	A	B	C	D	E	F	G	H	I	J	K
1	CV. MEDIA										
2	DAFTAR AKUN										
3											
4	NO. AKUN	NAMA AKUN									
5	01	Kas									
6	1102	Piutang Usaha									
7	1103	Asuransi Dibayar Di Muka									
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
22	4101	Pendapatan Jasa									
23	5101	Biaya Gaji									
24	5102	Biaya Asuransi									
25	5103	Biaya iklan									
26	5104	Biaya Telepon dan Listrik									
27	5105	Biaya Perlengkapan									
28	5106	Biaya Penyusutan Peralatan									
29	5107	Biaya Penyusutan Kendaraan									
30	5108	Biaya Penyusutan Gedung									
31	5109	Biaya Bunga									
32											
33											
34											
35											
36											
37											
38											
39											

Figure 7. Video Tutorials before Revision

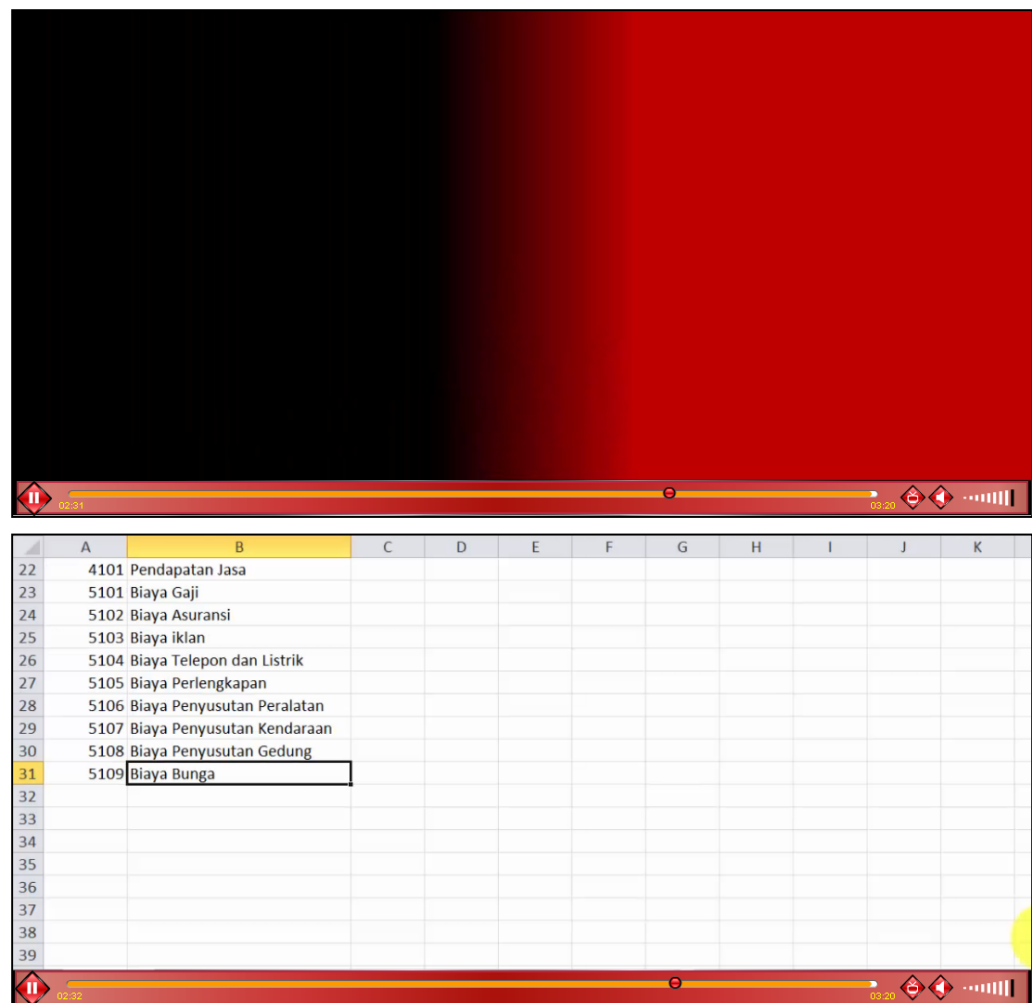


Figure 8. Video Tutorials after Revision

- g) Video Tutorial #7 *Membuat Neraca Lajur* judge too long that can cause students tired of looking. Therefore, cutting Video Tutorial #7 *Membuat Neraca Lajur* to 5 video tutorials. Video Tutorial are separated by columns sheet, namely: *Neraca Saldo*, *Penyesuaian*, *NSD*, *Laba/Rugi*, and *Neraca*.

## 2) Revision from Media Expert

- a) Correction in the font size Interactive Learning Module that are judged by the media expert too small.



Figure 9. Font Size before Revision

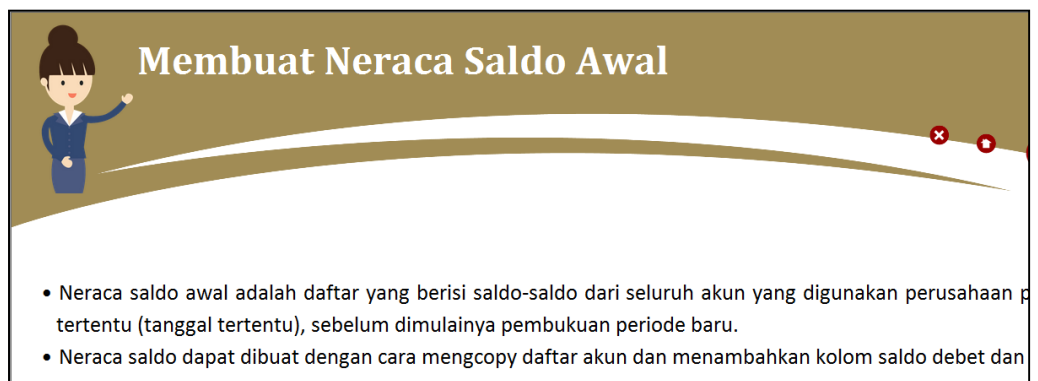


Figure 10. Font Size after Revision

- b) Page layout in the Direction page is considered too formal by Media Experts, so it is necessary to add an image and an attractive color.



Figure 11. Direction Page before Revision



Figure 12. Direction Page after Revision

- c) The effects of the transition on the navigation key assessed annoying, so be revised to eliminate the effects of the transition on the navigation key.
- d. Product Validation II

Product Validation II conducted by accounting practitioners are accounting teacher at SMK Negeri 1 Yogyakarta, Mr Marsono, S.Pd. Validation is done related to material aspects, language, learning design, software engineering and visual communication of Interactive Learning Module developed with the filling of 1-5 scale questionnaire. Recapitulation of accounting teacher validation can be seen in Appendix 5.b. Page 233. Additionally, accounting teacher also provide comments and suggestions to improve the media. In summary, recapitulation of the value presented in the following table:

Tabel 19. Result of Validation Media by Accounting Teacher

No	Feasibility Aspect	Score	Average	Category
1	Material	46	4,6	Strongly Feasible
2	Language	9	4,5	Strongly Feasible
3	Learning Design	25	4,17	Feasible
4	Software Engineering	12	4	Feasible
5	Visual Communication	31	4,43	Strongly Feasible
<b>Total</b>		<b>123</b>	<b>4,34</b>	<b>Strongly Feasible</b>

According to Table 10, about the conversion of quantitative data into qualitative data, it is known that the average score (X) 4.34 lies in the range of  $4.20 > X < 5$ , which means that the products developed in the category "Strongly Feasible". The results of the validation by accounting teacher show that Interactive Learning Module are developed based on assessment material aspects, language, learning design, software engineering and visual communication is strongly feasible tested based on the advice and comments from accounting teacher.

e. Product Revision II

Revised second stage serves to make the Interactive Learning Module feasible as a learning media in school. Revisions made after the second stage of Interactive Learning Module products validated by the accounting teacher. Here are the things that need to be revised based on advice from the accounting teacher:

- 1) Correction of writing nominal rupiah. Behind nominal added two digits behind the comma.

CV. MEDIA Neraca Saldo Per 30 November 2015			
No. Akun	Nama Akun	Saldo	
		Debet	Kredit
1000	Aktiva		
1100	Aktiva Lancar		
1101	Kas	Rp 27.500.000	
1102	Piutang Usaha	Rp 12.300.000	
1103	Asuransi Dibayar di Muka	Rp 18.000.000	
1104	Iklan Dibayar di Muka		
1105	Perlengkapan	Rp 4.800.000	
1200	Aktiva Tetap		
1201	Peralatan	Rp 15.000.000	
1202	Akumulasi Penyusutan Peralatan		Rp 3.000.000
1203	Kendaraan	Rp 20.000.000	
1204	Akumulasi Penyusutan Kendaraan		Rp 10.000.000
1205	Gedung	Rp 75.000.000	
1206	Akumulasi Penyusutan Gedung		Rp 25.000.000
1207	Tanah	Rp 30.000.000	

Figure 13. Writing Rupiah before Revision

CV. MEDIA Neraca Saldo Per 30 November 2015			
No. Akun	Nama Akun	Saldo	
		Debet	Kredit
1000	Aktiva		
1100	Aktiva Lancar		
1101	Kas	Rp 27.500.000,00	
1102	Piutang Usaha	Rp 12.300.000,00	
1103	Asuransi Dibayar di Muka	Rp 18.000.000,00	
1104	Iklan Dibayar di Muka		
1105	Perlengkapan	Rp 4.800.000,00	
1200	Aktiva Tetap		
1201	Peralatan	Rp 15.000.000,00	
1202	Akumulasi Penyusutan Peralatan		Rp 3.000.000,00
1203	Kendaraan	Rp 20.000.000,00	
1204	Akumulasi Penyusutan Kendaraan		Rp 10.000.000,00
1205	Gedung	Rp 75.000.000,00	
1206	Akumulasi Penyusutan Gedung		Rp 25.000.000,00
1207	Tanah	Rp 30.000.000,00	

Figure 14. Writing Rupiah after Revision

- 2) Correction writing transaction CV. MEDIA on December 16, 2016. The writing is true is "*membayar utang usaha*" not "*melunasi utang usaha*", because with the payment of Rp

1.500.000,00 debts owned businesses CV. MEDIA has not paid off.

Tanggal 16  
Perusahaan melunasi utang usaha sebesar Rp 1.500.000,00.

Figure 15. Transaction Text before Revision

Tanggal 16  
Perusahaan membayar utang usaha sebesar Rp 1.500.000,00.

Figure 16. Transaction Text after Revision

#### 4. Implementation Stage

Implementation stage conducted on 32 students of class XI AK 2 SMK Negeri 1 Yogyakarta. The field trials carried out during two meetings on 24 and 31 October, 2016. The field try out is done in the computer laboratory, researcher previously has copied media into the computers. Students are mentored by researcher in the use of Interactive Learning Module. The researcher using laptop and LCD in practicing the use of Interactive Learning Module and sometimes around the class to help if there are students who ask. Students seemed happy to use Interactive Learning Module. After the students tried to use, students were asked to complete a questionnaire given to provide a response the module. Recapitulation of the response and student opinion can be seen in Appendix 6.c. Page 239. In summary, the recapitulation of the average of the students' responses as follows:

Table 20. Result of Students' Response about Media

No	Feasibility Aspect	Score	Average	Category
1	Material	555	4,34	Strongly Feasible
2	Language	134	4,19	Feasible
3	Learning Design	567	4,43	Strongly Feasible
4	Software Engineering	374	3,90	Feasible
5	Visual Communication	827	4,31	Strongly Feasible
<b>Total</b>		<b>2,457</b>	<b>4,23</b>	<b>Strongly Feasible</b>

According to Table 10, about the conversion of quantitative data into qualitative data, it is known that the average score (X) 4.23 lies in the range of  $4.20 > X < 5$ , which means that the products developed in the category "Strongly Feasible". The results of the students' response questionnaire shows that Interactive Learning Module that was developed based on the assessment material aspects, language, learning design, software engineering, and visual communication is strongly feasible to use as a learning media. Students also give comments and suggestion about Interactive Learning Module in the questionnaires. The recapitulation of comments and suggestion from students as follows:

Table 21. Students' Comments and Suggestion about Media

No	Comments and Suggestion
1	Interactive learning module is interesting
2	Media is good and improve learning motivation
3	Easy to understand the materials
4	Very helpful in understanding the materials
5	Exercises is challenging
6	Backsound in the modul is not good
7	Require a long time (few minutes) to open the modul



## 5. Evaluation Stage

Evaluation stage conducted to evaluate the objective of making the products Interactive Learning Module. The purpose of making the products is to increase students' motivation in class XI AK 1. Measurement of motivation performed on 7 and 14 November 2016 in class XI AK 1 that consist of 32 students.

Increased Student Motivation can be seen from the measurement results initial motivation and final motivation with Likert Scale. The questionnaire contains 16 items graded valid questions with details of 10 positive statements and 6 negative statement. Questionnaire reliability test result with Cronbach's Alpha was 0.833. According to Table 8, research instrument has a very strong reliability because the value of the reliability coefficient  $\geq 0.80$ .

Filling initial motivation questionnaire that has been validated, conducted before students use the Interactive Learning Module. Filling final motivation questionnaire conducted after the end of the students using the Interactive Learning Module. Two results of motivation before and after the use of media compared, so it can be seen scores increase student motivation.

Table 22. Recapitulation of Student Learning Motivation Result

No	Learning Motivation Indicator	Before		After		Increase
		Total	Percentage	Total	Percentage	
1	There is a passion and desire to succeed	600	75%	628	79%	4%
2	The drive and the need to learn	129	81%	139	87%	6%
3	There is hope and ideals of the future	354	74%	379	79%	5%
4	There is award in learning	211	66%	227	71%	5%
5	The interest activity in learning	204	64%	239	75%	11%
6	There is a conducive learning environment	305	64%	337	70%	6%
<b>Total</b>		<b>1.803</b>	<b>70,43%</b>	<b>1.949</b>	<b>76,13%</b>	<b>5,7%</b>

Based on the initial and final measurement of Learning Motivation, it can be concluded that the development of Interactive Learning Module can increase students' motivation to learn accounting with an increase of 5.7% from the score of motivation before the use of 70.43% and the score of motivation after use of 76.13%. Recapitulation of learning motivation scores before and after the use of Interactive Learning Module was complete can be found in Appendix 7.b. and Appendix 7.c. Learning Motivation Score before and after using Interactive Learning Module, can be known as follows:

Learning Motivation Score Before using Interactive Learning Module:

$$\begin{aligned}
 &= \frac{\text{motivation score}}{\text{maximal score motivation}} \times 100\% \\
 &= \frac{1.803}{16 \times 5 \times 32} \times 100\% \\
 &= 70,43\%
 \end{aligned}$$

Learning Motivation Score After using Interactive Learning Module:

$$\begin{aligned}
 &= \frac{\text{motivation score}}{\text{maximal score motivation}} \times 100\% \\
 &= \frac{1.949}{16 \times 5 \times 32} \times 100\% \\
 &= 76,13\%
 \end{aligned}$$

The hypothesis proposed in test different this research consists of the alternative hypothesis ( $H_a$ ) i.e. the development Interactive Learning Module as learning media will improve Student Motivation, so that the null hypothesis ( $H_0$ ) reads development Interactive Learning Module as a learning media will not improve Student Motivation. To test the hypothesis, the researcher used paired sample t-test. The following is the total score of each student's motivation before and after using Interactive Learning Module:

Table 23. Total of Students' Learning Motivation Score

No	Before	After
1	51	61
2	49	55
3	50	61
4	50	51
5	63	69
6	56	60
7	52	60
8	54	57

No	Before	After
9	57	62
10	56	60
11	58	61
12	47	49
13	61	62
14	60	63
15	53	63
16	52	56
17	60	59
18	62	67
19	57	59
20	58	58
21	59	62
22	57	60
23	57	75
24	63	67
25	52	52
26	54	61
27	56	65
28	70	63
29	56	62
30	60	69
31	54	53
32	59	67
<b>Total</b>	<b>1.918</b>	<b>2.075</b>

Source: processed development research data

Table 24. Result Recapitulation of Paired Sample Statistic

	Mean		Correlation	Sig.	T	Sig. (2-tailed)
	Before	After				
Pair 1	56.34	60.91	.620	.000	-5.654	.000

Paired sample statistics tables were showing the results of the calculation of the average score total initial motivation was 56.34 while the final motivation score was 60.91. Table of paired sample correlations showed that the correlation between two variables was 0.620, with sig 0.000. That was, the correlation between the total

motivation score before and after the use of Interactive Learning Module is accurate and significant. If empirical  $t \geq t\text{-table}$  then the hypothesis  $H_0$  is rejected, otherwise earned  $H_a$  hypothesis. On testing the t-test obtained empirical  $t$  was -5.654 with  $\text{sig } (p) = 0.000$ . Because empirical  $t > t \text{ table } (0.68249)$  and  $p < 0.05$  then it indicated that  $H_0$  rejected and  $H_a$  accepted. This showed the development of the Interactive Learning Module will show the motivation of studying accounting. Interactive Learning Module will affect the score students' Learning Motivation.

### **C. Discussion**

#### **1. Development of Interactive Learning Module**

This research and development procedure was adapted from summary activities ADDIE Dick and Carey model (1996) as revealed by Endang Mulyatiningsih (2011:185-186). The ADDIE model consists of five stages: 1) Analysis, 2) Design, 3) Development or Production, 4) Implementation or Delivery, and 5) Evaluation.

Interactive Learning Module can increase the learning motivation, starting from the analysis of the learners' needs of at the moment of observation. The researcher conducted observations on July 25, 2016. The number of students who attend amounted to 32 students. Based on the observations showed that teachers use media like text books and publish spreadsheet program using the LCD projector. Students are less enthusiastic about participating in learning activities because they

can't follow the step described by the teacher. They need a learning media are more varied, interesting, and helps the students' understanding regarding the material difficult to understand.

The next step is to analyze competence. Researchers analyzed the subjects that will be used as resource materials in the module. Based on the analysis of competence, the researchers used computer subjects of accounting on the basis of competence making financial statements using spreadsheet which have been considered difficult by students.

Researchers designed a media format that is made from a page Preface, navigation button layout, the location of the menu, and so on designed the storyboard first. Content created i.e. basic competencies making financial statements using spreadsheet, then processed by the prepare materials and create questions together with answer key. It also created a video tutorial script.

Research instrument used in the development of Interactive Learning Module was the feasibility and motivation questionnaire. The researchers did not do a validity test of the feasibility questionnaire because researcher testing constructs validity (expert judgment) to experts for asking their opinion about the instruments that have been compiled. The instrument uses a Likert Scale, i.e. 5 (Very Good), 4 (Good), 3 (Enough), 2 (Bad), 1 (Very Bad). Questionnaire feasibility sourced from Wahono (2006) covering the aspects of material,

language, learning design, software engineering and visual communication that have been modified.

Motivation questionnaire that is used by researcher is taken from six indicators measurement by Uno (2015:23) with modifications, so that at the moments before the questionnaire is used in the field test, the researchers conducting the questionnaire test in class XI AK 2 SMK Negeri 1 Yogyakarta. The reason of the class test on class XI AK 2 because of the similarity of characteristic. The test result showed that motivation questionnaire contained 16 statements were valid and 10 statement were invalid. Motivation questionnaire also reliable and can be used to measure learning motivation.

The next step done was to find out the feasibility of the media by the experts. The selected validator material expert derived from accounting education Lecturer and media expert from educational curriculum and technology lecturer. The researcher also did a revision of Interactive Learning Module in order to gain feasible media that deserves to be tested to the subject in the field trials in accordance with the advice and input of experts. Interactive Learning Module implemented in the subject field trials. The number of subject field trial are 32 students of class XI AK 2 SMK Negeri 1 Yogyakarta. Students seemed enthusiastic when using modules, especially when attention to video and work on the competency test.

As for the primary purpose of Interactive Learning Module development was to improve the learning motivation of students. Interactive Learning Module implemented in class XI AK 1 SMK Negeri 1 Yogyakarta that consist of 32 students. Researchers conducting the measurement of student learning motivation enhancement by way of collecting and recapping learning motivation question form both before and after the use of Interactive Learning Module.

## **2. Feasibility of Interactive Learning Module**

Feasibility of Interactive Learning Module was known through the stages of validation by experts. The researcher chose the validator which consists of Material Expert, Media Expert, and Accounting Teacher. Data collection instruments used media feasibility question form at scale of 1-5. More explanation is as follows:

### **a. Material Expert**

Material expert came from a lecturer in the Department of Accounting Education, Faculty of Economics of Yogyakarta State University i.e. Mr. Rizqi Ilyasa Aghni, M.Pd. Media was assessed through aspects of material, language, and learning design. The feasibility of Interactive Learning Module on the material aspects gained 75 total score with the average 4.41 of the maximum score of 85 and an average maximum of 5. On the language aspects obtained a total score of 13 with an average score of 4.33 on



maximum score 15 with an average maximum of 5. On the learning design aspects obtained a total score of 24 with an average score of 4 on maximum score 30 with an average maximum of 5. From three aspects obtained a total score of 112 with an average score of 4.25. The researchers also did a revision of the product on the advice and comments provided by material experts, so the media was very feasible to be tested.

b. Media Expert

Media expert came from a lecturer in the Department of Educational Curriculum and Technology, Faculty of Educational Science of Yogyakarta State University i.e. Mr. Estu Miyarso, M. Pd. Media was assessed through aspects of software engineering and visual communication. The feasibility of Interactive Learning Module on the software engineering aspects gained 34 total score with the average 4.25 of the maximum score of 40 and an average maximum of 5. On the visual communication aspects obtained a total score of 62 with an average score of 4.43 on maximum score 70 with an average maximum of 5. From both aspects obtained a total score of 96 with an average score of 4.34. The researchers also did a revision of the product on the advice and comments provided by media experts, so the media was very feasible to be tested.

c. Accounting Teacher

Teachers selected to be a validator is a teacher of Computer Accounting (Spreadsheet) Subject in SMK Negeri 1 Yogyakarta i.e. Mr Marsono, S.Pd. Media was assessed through aspects of material, language, learning design, software engineering and visual communication. The feasibility of Interactive Learning Module on the material aspects gained 46 total score with the average 4.6 of the maximum score of 50 and an average maximum of 5. On the language aspects obtained a total score of 9 with an average score of 4.5 on maximum score 10 with an average maximum of 5. On the learning design aspects obtained a total score of 25 with an average score of 4.17 on maximum score 30 with an average maximum of 5. On the software engineering aspects gained 12 total score with the average 4 of the maximum score of 15 and an average maximum of 5. On the visual communication aspects obtained a total score of 31 with an average score of 4.43 on maximum score 35 with an average maximum of 5. From five aspects obtained a total score of 123 with an average score of 4.34. The researchers also did a revision of the product on the advice and comments provided by accounting teacher, so the media was very feasible to be tested.

### **3. Students' Response About Interactive Learning Module**

Student of XI AK 2 SMK Negeri 1 Yogyakarta becomes the subject of field trials Development of Interactive Learning Module. Each student is gave their assessment sheet which is expected to give a response to the appropriateness of Interactive Learning Module based on aspects of material aspects, language, learning design, software engineering, and visual communication.

Based on the results of the students' response, the feasibility of Interactive Learning Module on the material aspects obtained average score 4.34. On the language aspects obtained average score of 4.19. On the learning design aspects obtained average score of 4.43. On the software engineering aspects obtained average score 3.9. On the visual communication aspects obtained average score of 4.31. From five aspects obtained average score of 4.23. Thus, it can be concluded that the Interactive Learning Module in Computer Accounting Subject were very feasible to be used as a learning media for students in vocational high school.

### **4. Improvement Student Motivation After Using Interactive Learning Module**

Recapitulation of motivation questionnaire before and after the use of Interactive Learning Modules can be seen in Table 21. Based on the recapitulation shows that after use of the module, students' motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta increases. T-test was

done in Table 23, it was concluded that Interactive Learning Module increasing Student Motivation.

Seen from the sequence increase learning motivation largest of the six indicators, the biggest improvement contained in the indicator "The interest in learning activity" with a score of 11%. The second sequence is an indicator of "The drive and the need to learn" and "There is a conducive learning environment" with the same score of 6%. The third sequence is an indicators "There is hope and ideals of the future" and "There is award in learning" with the same score by 5%. The fourth sequence is the indicator "There is a passion and desire to succeed" with a score of 4%.

#### **D. Development Limitations**

The limitations in the development of Interactive Learning Module are:

1. Materials developed only on the basic competencies making financial statements using a spreadsheet in Computer Accounting Subject for Class XI Accounting Department.
2. The trial is only be done on a limited audience in class XI Accounting (64 students) at SMK Negeri 1 Yogyakarta.
3. Learning using this media can only be done at the computer laboratory.
4. Interactive Learning Module can only be used on a computer/laptop.
5. Exercises has not been validated so the quality of the questions is untested.
6. Data collection techniques only using questionnaire.

## **CHAPTER V**

### **CONCLUSION AND RECOMMENDATION**

#### **A. Conclusion**

Based on research result and discussion it can be inferred that:

1. The development of Interactive Learning Module is done through the five stages, they are:
  - a. Analysis, the initial phases that include competence analysis, analysis of media competence, learners' needs analysis and the formulation of goals.
  - b. Design, designing Interactive Learning Module consist of design of flowchart, storyboard, material, video tutorials, and exercises.
  - c. Development, Interactive Learning Module product manufacturing and research instrument which will be validated and be revised.
  - d. Implementation, Interactive Learning Module trial stage to the subject of field trials.
  - e. Evaluation, the final stages of development for the measurement of the achievement achieved by purpose of Learning Media of Interactive Learning Module products increased the motivation of learning students.
2. The level of feasibility of Interactive Learning Module known based on expert assessment (material expert, media expert, and accounting teacher) of the materials and media that includes experts on material, language, learning design, software engineering, and visual communication. The results of the validation show that the Interactive

Learning Module as a learning media declared as Strongly Feasible category with average scores 4.25 by material expert, 4.34 by media expert, and 4.34 by accounting teacher.

3. The response of the students of class XI AK 2 (field try out) about Interactive Learning Module on the material, language, learning design, software engineering, and visual communication aspects obtained average value of 4.23 with the category of Strongly Feasible.
4. Interactive Learning Module can increase the learning motivation of students class XI AK 1, it can be measured from acquisition of students' recapitulation of 70.43% for the score of initial motivation. While the score the final motivation of 76.13%. The results of the t test show that empirical t was -5.654 with sig. 0.000 shows significant measurements. Thus it can be concluded the development of Interactive Learning Module can improve students learning motivation.

## **B. Recommendation**

Based on the development research and the researcher' weakness in developing Interactive Learning Module as a media of learning still has many shortcomings. Then the researcher offer suggestions as follow:

1. Teachers better develop Interactive Learning Module in order to spur and improve student motivation.

2. This Interactive Learning Module can be used as a helping tool when learning process is taken place so that the students' may became more active, creative, effective, and enthusiastic.
3. Interactive learning module could be develop with adding more Basic Competencies.
4. Interactive Learning Module could be develop by using wider sample testing to get better result.
5. Exercises better validated before presented in the Interactive Learning module in order to prove the quality of questions.
6. For further research needs to be done action research or experimental research involving the control class to actually measure the effectiveness of the use of Interactive Learning Module.
7. It need for further development of Interactive Learning Module that can be used not only for the computer/laptop but also can be used in mobile phones.
8. For further research better use data collection techniques not only questionnaire, but also using interview or observation.

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## **APPENDIX 1**

- a. Syllabus
- b. Lesson Plans (*Rencana Pelaksanaan Pembelajaran*)
- c. Material, Question, and Answer Key
- d. Flowchart
- e. Storyboard
- f. Final Product

**Appendix 1.a. Syllabus**

## SILABUS

**NAMA SEKOLAH** : SMK NEGERI 1 YOGYAKARTA  
**MATA PELAJARAN** : KOMPETENSI KEJURUAN  
**KELAS/SEMESTER** : XI/1  
**STANDAR KOMPETENSI** : MENGOPERASIKAN PAKET PROGRAM PENGOLAH ANGKA / SPREADSHEET  
**KODE** : 119 KK 09.02  
**ALOKASI WAKTU** : 56 JAM PELAJARAN @ 45 MENIT

KOMPETENSI DASAR	INDIKATOR	NILAI BUDAYA DAN KARAKTER BANGSA	MATERI PEMBELAJARAN	KEGIATAN PEMBELAJARAN	PENILAIAN	ALOKASI WAKTU			SUMBER BELAJAR
						TM	PS	PI	
1. Mengolah data dengan menggunakan rumus dan fungsi-fungsi program pengolah angka	<ul style="list-style-type: none"> <li>Menyajikan data dengan rumus matematika</li> <li>Menyajikan data dengan alamat sel (absolut, semi absolut, dan relatif)</li> <li>Menyajikan data dengan fungsi statistical</li> <li>Menyajikan data dengan fungsi teks</li> <li>Menyajikan data dengan fungsi date time</li> <li>Menyajikan data dengan fungsi logika</li> <li>Menyajikan data dengan fungsi lookup</li> <li>Menyajikan data dengan data sort</li> <li>Menyajikan data dengan data filter</li> <li>Menyajikan data dengan</li> </ul>	<ul style="list-style-type: none"> <li>Rasa Ingin Tahu</li> <li>Mandiri</li> <li>Teliti</li> <li>Kerja Keras</li> <li>Cermat</li> <li>Berpikir Logis</li> <li>Jujur</li> <li>Disiplin</li> <li>Tanggung-jawab</li> </ul>	<ul style="list-style-type: none"> <li>Pengolahan data dengan rumus matematika</li> <li>Pengolahan data dengan alamat sel</li> <li>Fungsi statistical</li> <li>Fungsi teks</li> <li>Fungsi date time</li> <li>Fungsi logika</li> <li>Fungsi lookup</li> <li>Data sort</li> <li>Data filter</li> <li>Grafik</li> <li>Fungsi finansial</li> </ul>	<ul style="list-style-type: none"> <li>Mengolah data dengan rumus matematika</li> <li>Mengolah data dengan alamat sel</li> <li>Mengolah data dengan fungsi statistical</li> <li>Mengolah data dengan fungsi teks</li> <li>Mengolah data dengan fungsi date time</li> <li>Mengolah data dengan fungsi logika</li> <li>Mengolah data dengan fungsi lookup</li> <li>Mengolah data</li> </ul>	<ul style="list-style-type: none"> <li>Praktik</li> <li>Penugasan</li> <li>Tes Tertulis</li> </ul>	4	4 (8)		<ul style="list-style-type: none"> <li>Modul</li> <li>Aplikasi Excel dalam Akuntansi Keuangan-Elex Media Komputindo</li> <li>Aplikasi Excel dalam Financial Terapan- Elex Media Komputindo</li> <li>Buku lain yang relevan</li> </ul>

	grafik • Menyajikan data dengan fungsi finansial			dengan data sort • Mengolah data dengan data filter • Mengolah data dengan grafik • Mengolah data dengan fungsi finansial					
2. Mengentri data	• Karakter sel teridentifikasi • Karakter data teridentifikasi • Dokumen transaksi keuangan teridentifikasi • Lembar kerja/jobsheet untuk mencatat dokumen sumber tersedia • Data transaksi dientri sesuai dengan karakter sel • Hasil entri disesuaikan dengan sumber data	• Rasa Ingin Tahu • Mandiri • Teliti • Kerja Keras • Cermat • Berpikir Logis • Jujur • Disiplin • Tanggung-jawab	• Karakter sel • Karakter data • Dokumen transaksi keuangan • Lembar kerja/jobsheet	• Mengidentifikasi karaktersel • Mengidentifikasi karakter data • Mengidentifikasi dokumen transaksi keuangan • Menyiapkan lembar kerja/jobsheet untuk mencatat dokumen sumber	• Tertulis • Praktek	4	4 (8)		• Modul • Aplikasi Excel dalam Akuntansi Keuangan-Elex Media Komputindo • Aplikasi Excel dalam Financial Terapan- Elex Media Komputindo • Buku lain yang relevan
3. Mengolah data dengan menggunakan rumus dan fungsi-fungsi program pengolah angka untuk aplikasi akuntansi	• Menyajikan data dengan rumus Matematika • Menyajikan data dengan alamat sel (absolut, semi absolut dan relatif) • Menyajikan data dengan fungsi statistical • Menyajikan data dengan fungsi teks • Menyajikan data dengan fungsi date time • Menyajikan data dengan fungsi logika • Menyajikan data dengan fungsi lookup	• Rasa Ingin Tahu • Mandiri • Teliti • Kerja Keras • Cermat • Berpikir Logis • Jujur • Disiplin • Tanggung-jawab	Fungsi-fungsi dalam Microsoft Excel untuk aplikasi akuntansi	Menggunakan fungsi-fungsi dalam Microsoft Excel untuk aplikasi akuntansi	• Praktik • Penugasan • Tes Tertulis	6	8 (16)		• Modul • Aplikasi Excel dalam Akuntansi Keuangan-Elex Media Komputindo • Aplikasi Excel dalam Financial Terapan- Elex Media Komputindo • Buku lain yang relevan

4. Membuat laporan	<ul style="list-style-type: none"> <li>▪ Laporan keuangan dibuat dalam bentuk table</li> <li>▪ Laporan keuangan dibuat dalam bentuk grafik</li> <li>▪ Laporan keuangan dicetak dalam bentuk <i>print out</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rasa Ingin Tahu</li> <li>• Mandiri</li> <li>• Teliti</li> <li>• Kerja Keras</li> <li>• Cermat</li> <li>• Berpikir Logis</li> <li>• Jujur</li> <li>• Disiplin</li> <li>• Tanggung-jawab</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mencatat transaksi</li> <li>▪ Posting catatan transaksi ke rekening yang bersangkutan di buku besar</li> <li>▪ Membuat daftar saldo yang ada di buku besar untuk menyusun neraca saldo</li> <li>▪ Membuat laporan keuangan</li> </ul>	<ul style="list-style-type: none"> <li>▪ Membuat laporan keuangan dengan menggunakan Ms. Excel</li> <li>▪ Mencetak laporan dalam bentuk <i>print out</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tertulis</li> <li>• Praktek</li> </ul>	2	4 (8)		<ul style="list-style-type: none"> <li>• Modul</li> <li>• Aplikasi Excel dalam Akuntansi Keuangan-Elex Media Komputindo</li> <li>• Aplikasi Excel dalam Financial Terapan- Elex Media Komputindo</li> <li>• Buku lain yang relevan</li> </ul>
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Keterangan:

TM : Tatap Muka

PS : Praktik di Sekolah (2 jam praktik di sekolah setara dengan 1 jam tatap muka)

PI : Praktek di Industri (4 jam praktik di Du/Di setara dengan 1 jam tatap muka)

Mengetahui  
Kepala Sekolah

Yogyakarta, Juli 2016

Guru Mata Pelajaran

Dra. Darwestri  
NIP 195807311987032002

Marsono, S.Pd.  
NIP 19710827 200801 1 004

**Appendix 1.b. Lesson Plans (*Rencana Pelaksanaan Pembelajaran*)**

## RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

Satuan Pendidikan : SMKN 1 Yogyakarta  
 Program Keahlian : Bisnis dan Manajemen  
 Kompetensi Keahlian : Akuntansi  
 Mata Pelajaran : Produktif Akuntansi (*Spreadsheet*)  
 Kelas/Semester : XI/Gasal  
 Tahun Pelajaran : 2016/2017  
 Alokasi Waktu : 4 x 45 menit (2 x Pertemuan)  
 Kode Kompetensi : 119 KK 09.2  
 KKM : 75  
 Standar Kompetensi : Mengoperasikan Paket Program Pengolahan Angka/*Spreadsheet*  
 Kompetensi Dasar : Membuat Laporan  
 Indikator :
 

1. Laporan keuangan dibuat dalam bentuk tabel.
2. Laporan keuangan dicetak dalam bentuk *print out*.
3. Laporan dibuat dalam bentuk grafik.

### 1. TUJUAN PEMBELAJARAN

1. Siswa dapat mengerjakan siklus akuntansi perusahaan jasa dengan menggunakan paket program pengolah angka/*spreadsheet* sehingga dapat menghasilkan laporan keuangan.
2. Siswa dapat membuat laporan keuangan dalam bentuk tabel.
3. Siswa dapat mencetak laporan keuangan dalam bentuk *print out*.
4. Siswa dapat membuat laporan keuangan dalam bentuk grafik.

Nilai Karakter yang dikembangkan:

1. Rasa Ingin Tahu
2. Teliti
3. Kerja Keras
4. Cermat
5. Berpikir Logis
6. Jujur
7. Disiplin
8. Tanggungjawab

### II. MATERI POKOK

1. Membuat Siklus Akuntansi Perusahaan Jasa:
  - a. Membuat Daftar Akun

- b. Membuat Neraca Saldo Awal
  - c. Membuat Jurnal Umum
  - d. Membuat Buku Besar
  - e. Membuat Neraca Saldo
  - f. Membuat Jurnal Penyesuaian
  - g. Membuat Neraca Lajur
  - h. Membuat Laporan Keuangan
2. Mencetak Laporan Keuangan
  3. Membuat Grafik

### III. METODE PEMBELAJARAN

1. Ceramah
2. Demonstrasi
3. Praktik
4. Tanya Jawab

### IV. KEGIATAN PEMBELAJARAN

#### Pertemuan 1

NO	KEGIATAN PEMBELAJARAN	PENGORGANISASIAN	
		PESERTA	WAKTU
<b>1</b>	<b>Pendahuluan</b> <ol style="list-style-type: none"> <li>a. Salam pembuka dan berdoa.</li> <li>b. Pengkondisian kelas.</li> <li>c. Presensi kehadiran siswa.</li> <li>d. Memantau kesiapan siswa untuk melaksanakan pembelajaran.</li> <li>e. Meminta siswa untuk menghidupkan komputer dan membuka program Ms. Excel 2010.</li> <li>f. Penyampaian kegiatan dan tujuan pembelajaran.</li> <li>g. Guru memberikan apersepsi tentang materi yang akan disampaikan.</li> </ol> <p>(nilai disiplin)</p>	Kelas	10 menit
<b>2</b>	<b>Kegiatan inti</b> <ol style="list-style-type: none"> <li>a. Eksplorasi               <ol style="list-style-type: none"> <li>1) Guru meminta siswa untuk membuka Modul Pembelajaran Interaktif <i>Spreadsheet</i> di</li> </ol> </li> </ol>	Kelas	10 menit



3	komputer masing-masing. 2) Guru menjelaskan petunjuk penggunaan modul. 3) Siswa mempelajari materi dan video tutorial yang terdapat dalam modul dengan bimbingan guru.  <i>(nilai rasa ingin tahu, teliti, dan cermat)</i>		
	b. Elaborasi Siswa praktik mengerjakan studi kasus yang ada di modul dengan menggunakan komputer masing-masing.  <i>(kerja keras, berpikir logis, dan tanggungjawab)</i>	Individu	50 menit
	c. Konfirmasi 1) Guru memeriksa hasil praktik siswa. 2) Guru memberikan kesempatan bertanya untuk siswa yang belum faham. 3) Guru memberikan penguatan materi.  <i>(nilai rasa ingin tahu dan jujur)</i>	Kelas	10 menit
	<b>Penutup</b> a. Guru bersama siswa menyimpulkan materi yang telah dipelajari. b. Guru menyampaikan kegiatan pembelajaran yang akan dilaksanakan pada pertemuan selanjutnya. c. Siswa merapikan kembali peralatan yang telah digunakan.  <i>(nilai tanggungjawab dan disiplin)</i>	Kelas	10 menit



3	<b>Penutup</b> a. Guru bersama siswa menyimpulkan materi yang telah dipelajari. b. Siswa merapikan peralatan yang telah digunakan.  <i>(nilai tanggungjawab dan disiplin)</i>	Kelas	10 menit
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## V. SUMBER DAN MEDIA

### 1. Sumber

Sumber bahan pembelajaran yang digunakan adalah:

Deky Noviar, Bimo Suciono. 2013. *Modul Mengoperasikan Paket Program Pengolah Angka/Spreadsheet untuk SMK dan MAK*. Jakarta: Erlangga.

### 2. Media

Media yang digunakan dalam pembelajaran ini adalah:

- Modul Pembelajaran Interaktif *Spreadsheet*
- Ms. Excel 2010

### 3. Alat

Alat yang digunakan dalam pembelajaran ini adalah:

- Komputer/Laptop
- Liquid crystal display projection panel* (LCD Proyektor)
- Headset*

## VI. PENILAIAN

1. Prosedur tes : ada di dalam Modul Pembelajaran Interaktif *Spreadsheet*

2. Jenis tes : Mengurutkan, Benar Salah, dan Pilihan Ganda

3. Pedoman Skor

No	Jenis Tes	Skor
1	Mengurutkan	5
2	Benar Salah	10
3	Pilihan Ganda	10
Jumlah Skor		25

4. Pedoman Penilaian

Nilai = Jumlah skor yang diperoleh siswa x 4

<b>Appendix 1.c. Material, Question, and Answer Key</b>
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**MODUL INTERAKTIF SPREADSHEET**

**Standar Kompetensi : Mengoperasikan Paket Program Pengolah Angka**  
*(Spreadsheet)*

**Kompetensi Dasar : Membuat Laporan**

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**A. PETUNJUK****1. Petunjuk Umum**

Modul Pembelajaran Interaktif adalah media pembelajaran berbasis komputer yang dapat digunakan sebagai sumber belajar siswa dengan *content* yang mendukung interaktifitas siswa. Modul ini disusun untuk Kompetensi Keahlian Akuntansi pada Standar Kompetensi Mengoperasikan Paket Program Pengolah Angka/*Spreadsheet*, khususnya Kompetensi Dasar Membuat Laporan.

Sebelum mempelajari modul ini, siswa harus memahami terlebih dahulu kompetensi dasar yang berkaitan dengan konsep dan prinsip ilmu komputer di pelajaran KKPI dan kompetensi dasar dalam menyusun laporan keuangan. Baca dan pahamiilah dengan baik materi dan studi kasus siklus akuntansi perusahaan jasa, serta kerjakan soal uji kompetensi di akhir pembahasan modul ini.

**2. Spesifikasi Komputer**

Pengoperasian modul interaktif ini membutuhkan spesifikasi komputer yang memadai agar program dapat berjalan dengan baik. Spesifikasi komputer yang dibutuhkan adalah:

- a. Sistem operasi Windows XP, Windows 7, atau di atasnya.
- b. RAM minimal 1 GB.
- c. Tampilan terbaik menggunakan resolusi layar 1400 x 800.
- d. Komputer sudah terinstal Program Microsoft Excel 2010.

## B. KOMPETENSI

### 1. Standar Kompetensi

Mengoperasikan Paket Program Pengolah Angka/*Spreadsheet*

### 2. Kompetensi Dasar

Membuat Laporan

### 3. Indikator

- a. Laporan keuangan dibuat dalam bentuk tabel.
- b. Laporan keuangan dicetak dalam bentuk *print out*.
- c. Laporan keuangan dibuat dalam bentuk grafik.

### 4. Tujuan Pembelajaran

- a. Siswa dapat mengerjakan siklus akuntansi perusahaan jasa dengan menggunakan paket program pengolah angka/*spreadsheet* sehingga dapat menghasilkan laporan keuangan.
- b. Siswa dapat membuat laporan keuangan dalam bentuk tabel.
- c. Siswa dapat mencetak laporan keuangan dalam bentuk *print out*.
- d. Siswa dapat membuat laporan keuangan dalam bentuk grafik.

## C. MATERI

### 1. Pendahuluan

Kompetensi Dasar Membuat Laporan merupakan salah satu kompetensi yang harus dikuasai oleh siswa SMK pada Kompetensi Keahlian Akuntansi. Kompetensi ini berisi tentang materi Membuat Siklus Akuntansi Perusahaan Menggunakan Paket Program Pengolah Angka/*Spreadsheet*. Terdapat beberapa langkah yang harus ditempuh untuk membuat siklus akuntansi, yaitu sebagai berikut:

- a. Membuat Daftar Akun
- b. Membuat Neraca Saldo Awal
- c. Membuat Jurnal Umum
- d. Membuat Buku Besar
- e. Membuat Neraca Saldo
- f. Membuat Jurnal Penyesuaian

- g. Membuat Neraca Lajur
- h. Membuat Laporan Keuangan

Setelah laporan keuangan selesai dibuat, barulah kemudian dapat membuat laporan keuangan dalam bentuk *print out* dan grafik. Modul ini membahas langkah-langkah pembuatan siklus akuntansi secara sederhana dengan pembahasan kasus perusahaan jasa. Berikut ini studi kasus yang akan dibahas dalam modul ini:

CV. MEDIA adalah perusahaan yang bergerak dalam bidang jasa periklanan. Adapun neraca saldo yang dimiliki CV. MEDIA periode 30 November 2015 adalah sebagai berikut:

**CV. MEDIA**  
**Neraca Saldo**  
**Per 30 November 2015**

No. Akun	Nama Akun	Saldo	
		Debet	Kredit
<b>1000</b>	<b>Aktiva</b>		
<b>1100</b>	<b>Aktiva Lancar</b>		
1101	Kas	Rp 27.500.000,00	
1102	Piutang Usaha	Rp 12.300.000,00	
1103	Asuransi Dibayar di Muka	Rp 18.000.000,00	
1104	Iklan Dibayar di Muka		
1105	Perlengkapan	Rp 4.800.000,00	
<b>1200</b>	<b>Aktiva Tetap</b>		
1201	Peralatan	Rp 15.000.000,00	
1202	Akumulasi Penyusutan Peralatan		Rp 3.000.000,00
1203	Kendaraan	Rp 20.000.000,00	
1204	Akumulasi Penyusutan Kendaraan		Rp 10.000.000,00
1205	Gedung	Rp 75.000.000,00	
1206	Akumulasi Penyusutan Gedung		Rp 25.000.000,00
1207	Tanah	Rp 30.000.000,00	
<b>2000</b>	<b>Kewajiban</b>		
<b>2100</b>	<b>Kewajiban Jangka Pendek</b>		
2101	Utang Usaha		Rp 25.750.000,00
2102	Utang Gaji		
<b>2200</b>	<b>Kewajiban Jangka Panjang</b>		

2201	Utang Bank		Rp 50.000.000,00
<b>3000</b>	<b>Modal</b>		
3101	Modal Keenan		Rp 63.450.000,00
3102	Prive Keenan	Rp 1.300.000,00	
<b>4000</b>	<b>Pendapatan</b>		
4101	Pendapatan Jasa		Rp 56.800.000,00
<b>5000</b>	<b>Biaya</b>		
5101	Biaya Gaji	Rp 23.000.000,00	
5102	Biaya Asuransi		
5103	Biaya Iklan	Rp 2.600.000,00	
5104	Biaya Telepon dan Listrik	Rp 4.500.000,00	
5105	Biaya Perlengkapan		
5106	Biaya Penyusutan Peralatan		
5107	Biaya Penyusutan Kendaraan		
5108	Biaya Penyusutan Gedung		
5109	Biaya Bunga		
<b>Jumlah</b>		<b>Rp 234.000.000,00</b>	<b>Rp 234.000.000,00</b>

Transaksi yang terjadi selama Bulan Desember 2015 adalah sebagai berikut:

- Tanggal 1, Diterima pendapatan pemasangan iklan sebesar Rp 15.800.000,00 tunai.
- Tanggal 3, Dibeli perlengkapan secara kredit sebesar Rp 900.000,00.
- Tanggal 7, Dibeli peralatan seharga Rp 6.300.000,00, dari jumlah tersebut dibayar tunai Rp 2.100.000,00 dan sisanya kredit.
- Tanggal 10, Tuan Keenan mengambil uang untuk keperluan pribadinya sebesar Rp 2.000.000,00.
- Tanggal 14, Diterima pendapatan pemasangan iklan sebesar Rp 18.100.000,00 dari jumlah tersebut dibayar tunai Rp 4.100.000,00 dan sisanya kredit.
- Tanggal 16, Perusahaan membayar utang usaha sebesar Rp 1.500.000,00.
- Tanggal 20, Dibayar gaji pegawai sebesar Rp 11.500.000,00.
- Tanggal 25, Membayar biaya bunga pinjaman bank sebesar 8% dari total pinjaman.
- Tanggal 27, Diterima pelunasan piutang dari pelanggan sebesar Rp 6.000.000,00.
- Tanggal 30, Dibayar biaya telepon dan listrik sebesar Rp 400.000,00.

Data penyesuaian pada tanggal 31 Desember 2015 adalah sebagai berikut:

1. Biaya penyusutan aktiva tetap perusahaan adalah:
  - a. Peralatan Rp 300.000,00.
  - b. Kendaraan Rp 500.000,00.
  - c. Gedung Rp 1.000.000,00.
2. Biaya iklan yang terpakai sebesar Rp 800.000,00.
3. Asuransi dibayar di muka sebesar Rp 18.000.000,00 adalah untuk 2 tahun terhitung mulai tanggal 1 Juli 2015.
4. Perlengkapan yang masih tersisa sebesar Rp 4.200.000,00.
5. Gaji yang masih harus dibayar sebesar Rp 1.000.000,00.

Dari data di atas, Anda sebagai akuntan di CV. MEDIA diminta untuk:

1. Mencatat transaksi ke dalam Jurnal Umum.
2. Membuat Buku Besar.
3. Membuat Neraca Saldo per 31 Desember 2015.
4. Membuat Jurnal Penyesuaian.
5. Membuat Neraca Lajur per 31 Desember 2015.
6. Membuat Laporan Keuangan yang terdiri dari Laporan Laba/Rugi, Laporan Perubahan Modal, dan Neraca

## **2. Membuat Daftar Akun**

- Langkah pertama yang dilakukan untuk membuat siklus akuntansi menggunakan *spreadsheet* adalah membuat daftar akun. Daftar akun merupakan tabel yang berisi nomor akun dan nama akun yang digunakan perusahaan.
- Daftar akun dibuat dengan mengetik secara langsung di program Ms. Excel.



### **3. Membuat Neraca Saldo Awal**

- Neraca saldo awal adalah daftar yang berisi saldo-saldo dari seluruh akun yang digunakan perusahaan pada suatu saat tertentu (tanggal tertentu), sebelum dimulainya pembukuan periode baru.
- Neraca saldo dapat dibuat dengan cara mengcopy daftar akun dan menambahkan kolom saldo debit dan kredit.

### **4. Membuat Jurnal Umum**

- Setelah mempersiapkan daftar akun dan neraca saldo awal, maka dapat dimulai menganalisis transaksi dan mengentri transaksi perusahaan ke dalam jurnal umum.
- Jurnal umum adalah alat untuk mencatat transaksi perusahaan yang dilakukan secara kronologis dengan menunjukkan akun yang harus didebet dan dikredit beserta jumlah rupiahnya masing-masing.
- Jurnal umum dibuat dengan menerapkan fungsi VLOOKUP dan ikon Data Form untuk mengentry transaksi.

### **5. Membuat Buku Besar**

- Setelah selesai membuat jurnal umum, langkah selanjutnya adalah membuat buku besar untuk mengelompokkan dan meringkas pengaruh transaksi-transaksi ke dalam akun-akun yang sesuai.
- Dalam buku besar, setiap akun akan memiliki form sendiri sebagai tempat untuk memposting (memindahkan) transaksi dari jurnal umum.
- Akun-akun dalam buku besar akan dikelompokkan sesuai dengan klasifikasi jenis akun, seperti: Aktiva Lancar, Aktiva Tetap, Kewajiban, Modal, Pendapatan, dan Beban. Setiap kelompok akun dibuat dalam worksheet yang berbeda-beda.
- Buku besar dapat dibuat dengan menerapkan fungsi VLOOKUP dan Data Advanced.

## 6. Membuat Neraca Saldo

- Setelah semua akun diposting ke buku besar, maka di akhir periode perlu disusun neraca saldo.
- Tujuan pembuatan neraca saldo adalah untuk menguji bahwa setelah semua posting dilakukan, jumlah debet sama dengan jumlah kredit.
- Kolom saldo pada neraca saldo diisi dengan memasukkan saldo akhir akun yang bersangkutan.

## 7. Membuat Jurnal Penyesuaian

- Jurnal penyesuaian dibuat agar setiap akun menunjukkan jumlah yang sebenarnya pada akhir periode.
- Langkah pembuatan jurnal penyesuaian adalah sama dengan pembuatan jurnal umum, yaitu dengan menerapkan fungsi VLOOKUP dan ikon Data Form.

## 8. Membuat Neraca Lajur

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debet dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.
  - a. Kolom Neraca Saldo didapat dari mengcopy sheet neraca saldo.
  - b. Kolom Penyesuaian
    - Penyesuaian Debet

=SUMIF(Penyesuaian;No. Akun Neraca Lajur;kolom debet  
Penyesuaian)

- o Penyesuaian Kredit

=SUMIF(Penyesuaian;No. Akun Neraca Lajur;kolom kredit  
Penyesuaian)

c. Kolom Neraca Saldo Disesuaikan

- o NSD Debet

=IF(OR(Neraca Saldo Debet+Penyesuaian Debet-  
Penyesuaian Kredit<0;Neraca Saldo Kredit<>0);0;Neraca  
Saldo Debet+Penyesuaian Debet-Penyusunan Kredit)

- o NSD Kredit

=IF(OR(Neraca Saldo Kredit+Penyesuaian Kredit-  
Penyesuaian Debet<0;Neraca Saldo Debet<>0);0;Neraca  
Saldo Kredit+Penyesuaian Kredit-Penyusunan Debet)

d. Kolom Laba/Rugi

- o Laba/Rugi Debet

=IF(No. Akun>=4000;Neraca Saldo Disesuaikan Debet;0)

- o Laba/Rugi Kredit

=IF(No. Akun>=4000;Neraca Saldo Disesuaikan Kredit;0)

- o Selisih Debet

=IF(Kolom kredit>dari kolom debet;kolom kredit-kolom  
debet;0)

- o Selisih Kredit

=IF(Kolom debet>dari kolom kredit;kolom debet-kolom  
kredit;0)

- o Keterangan Laba atau Rugi

=IF(Laba/Rugi sebelah kredit>Laba/Rugi sebelah  
debet;"LABA";"RUGI")

e. Kolom Neraca

- o Neraca Debet

=IF(No. Akun<4000;Neraca Saldo Disesuaikan Debet;0)

- Neraca Kredit  
=IF(No. Akun<4000;Neraca Saldo Disesuaikan Kredit;0)
- Selisih Debet  
=IF(Kolom kredit>dari kolom debit;kolom kredit-kolom debit;0)
- Selisih Kredit  
=IF(Kolom debit>dari kolom kredit;kolom debit-kolom kredit;0)

## 9. Membuat Laporan Keuangan

- Laporan keuangan dapat dibuat dengan membuat formnya terlebih dahulu kemudian mengcopy setiap akun dan saldo yang terdapat di neraca lajur.
- Terdapat 3 macam laporan keuangan yang harus dibuat oleh perusahaan, yaitu:
  - a. Laporan Laba/Rugi  
Laporan laba/rugi adalah laporan yang menunjukkan pendapatan, beban, dan laba/rugi pada periode tertentu.
  - b. Laporan Perubahan Modal  
Laporan perubahan modal adalah laporan yang menunjukkan penambahan atau pengurangan modal dan besarnya modal pada akhir periode tertentu.
  - c. Neraca  
Neraca adalah laporan yang menunjukkan posisi aktiva, kewajiban, dan modal perusahaan pada tanggal tertentu.

## 10. Mencetak Laporan Keuangan

- Laporan Keuangan yang terdapat dalam lembar kerja (worksheet) Microsoft Excel dapat dicetak dalam bentuk print out.
- Cara mencetak laporan keuangan adalah sama halnya dengan program aplikasi lainnya, yaitu dengan memanfaatkan menu print.

### 11. Membuat Laporan dalam Bentuk Grafik

- Laporan bentuk grafik adalah laporan berbentuk tampilan atau gambar yang dapat mempresentasikan perubahan data dalam suatu laporan secara lebih efektif dan efisien.
- Untuk membuat laporan dalam bentuk grafik, terlebih dahulu harus menyiapkan laporan atau record data dalam bentuk tabel.
- Laporan dalam bentuk grafik dapat berupa penjualan individual, penjualan bulanan, atau harga produk, dan laporan lainnya yang menunjukkan record dari kejadian atau peristiwa penting.

### D. UJI KOMPETENSI

#### Mengurutkan

Urutkanlah langkah-langkah dalam mengerjakan siklus akuntansi perusahaan jasa menggunakan program pengolah angka yaitu Ms. Excel 2010 !

.....	• Membuat Neraca Lajur
.....	• Membuat Neraca Saldo
.....	• Membuat Jurnal Penyesuaian
.....	• Membuat Jurnal Umum
.....	• Membuat Laporan Keuangan
.....	• Membuat Daftar Akun
.....	• Membuat Neraca Saldo Awal
.....	• Membuat Buku Besar

**Kunci Jawaban Mengurutkan**

7	• Membuat Neraca Lajur
5	• Membuat Neraca Saldo
6	• Membuat Jurnal Penyesuaian
3	• Membuat Jurnal Umum
8	• Membuat Laporan Keuangan
1	• Membuat Daftar Akun
2	• Membuat Neraca Saldo Awal
4	• Membuat Buku Besar

**Benar Salah**

1. VLOOKUP adalah fungsi pembacaan tabel vertikal yang dapat digunakan untuk membuat jurnal umum.
2. Cara mengisi data transaksi di Buku Besar adalah dengan menggunakan Data Advanced.
3. Data Short adalah fasilitas yang digunakan untuk memasukkan semua transaksi ke dalam jurnal umum.
4. Fungsi yang digunakan untuk memunculkan nama akun di Buku Besar adalah HLOOKUP.
5. Tombol yang digunakan untuk menambah record baru dalam Jurnal Umum adalah New.
6. Terdapat 5 kolom dalam neraca lajur, yaitu kolom Neraca Saldo, Penyesuaian, NSD, Laba/Rugi, dan Neraca.
7. Chart Layout digunakan untuk merubah nama grafik.
8. Perintah untuk melihat format cetak terlebih dahulu sebelum dicetak ke printer adalah Print Setup.
9. Untuk membuat Neraca Saldo, data keuangannya diambil dari Jurnal Umum.

10. Tombol pada keyboard yang berfungsi untuk mengabsolutkan sel adalah F4.

### Kunci Jawaban Benar Salah

1. Benar
2. Benar
3. Salah
4. Salah
5. Benar
6. Benar
7. Salah
8. Salah
9. Salah
10. Benar

### Pilihan Ganda

1. Rumus yang digunakan untuk memasukkan data pada kolom Neraca Saldo Disesuaikan (NSD) debet adalah...
  - a. =SUMIF(or(neraca saldo debet+penyesuaian debet-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debet+penyesuaian debet-penyesuaian kredit)
  - b. =IF(or(neraca saldo debet+penyesuaian debet-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debet+penyesuaian debet-penyesuaian kredit)
  - c. =IF(or(and(neraca saldo debet+penyesuaian debet-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debet+penyesuaian debet-penyesuaian kredit)
  - d. =SUMIF(and(neraca saldo debet+penyesuaian debet-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debet+penyesuaian debet-penyesuaian kredit)

- e. `=IF(and(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)`
2. Ikon yang digunakan untuk menambah sheet baru adalah...
  - a. Insert Column
  - b. New Worksheet
  - c. New Column
  - d. Insert Sheet
  - e. Insert Worksheet
3. Rumus yang digunakan untuk memasukkan data pada lajur Penyesuaian Debet adalah...
  - a. `=SUM(penyesuaian;no. akun neraca lajur; kolom debit penyesuaian)`
  - b. `=AVERAGE(penyesuaian;no. akun neraca lajur; kolom debit penyesuaian)`
  - c. `=SUMIF(penyesuaian;no. akunneracalajur; kolom debit penyesuaian)`
  - d. `=MIN(penyesuaian;no. akun neraca lajur; kolom debit penyesuaian)`
  - e. `=IF(penyesuaian;no. akun neraca lajur; kolom debit penyesuaian)`
4. Salah satu langkah membuat buku besar adalah menggunakan Data Advanced, pada kotak dialog Advanced Filter terdapat keterangan Action yang harus diisi dengan ....
  - a. List Range
  - b. Filter the list, in-place
  - c. Criteria Range
  - d. Copy to another location
  - e. Unique records only
5. Tanda sama dengan (=) di spreadsheet disebut dengan...
  - a. Pembagian
  - b. Asteris



- c. Formula
  - d. Penjumlahan
  - e. Pengurangan
6. Berikut ini pengelompokan akun yang digunakan sebagai dasar pembuatan sheet buku besar, kecuali...
- a. Kas
  - b. Utang
  - c. Modal
  - d. Beban
  - e. Pendapatan
7. Langkah yang dapat dilakukan untuk memberi nama/judul grafik adalah...
- a. Klik kiri Chart Title
  - b. Klik kanan Edit Title
  - c. Klik kanan Chart Title
  - d. Klik kiri Edit Title
  - e. Klik Move Chart
8. Untuk membuat Laporan Posisi Keuangan/Neraca, data diambil dari kolom...
- a. NSD
  - b. Neraca
  - c. Laba/Rugi
  - d. Penyesuaian
  - e. No. Akun
9. Rumus yang digunakan untuk memasukkan data pada lajur Penyesuaian Kredit adalah...
- a.  $\text{=MIN}(\text{penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian})$
  - b.  $\text{=SUM}(\text{penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian})$
  - c.  $\text{=IF}(\text{penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian})$

- d. =AVERAGE(penyesuaian;no. akun neraca lajur; kolom kredit  
penyesuaian)
  - e. =SUMIF(penyesuaian;no. akun neraca lajur; kolom kredit  
penyesuaian)
10. Perintah untuk menyalin nilai sekaligus format data adalah...
- a. Validations
  - b. Values and number format
  - c. All except borders
  - d. Bullet and numbering
  - e. Formulas and number format

### **Kunci Jawaban Pilihan Ganda**

- 1. B
- 2. E
- 3. C
- 4. D
- 5. C
- 6. A
- 7. C
- 8. B
- 9. E
- 10. B

### **Studi Kasus**

CV. EXPRESS adalah perusahaan jasa yang dimiliki oleh Tuan Putra. CV. EXPRESS bergerak di bidang pengiriman barang. Anda sebagai akuntan CV. EXPRESS bertugas untuk mengerjakan pembukuan dengan menggunakan Microsoft Excel 2010 sebagai program pengolah angka/*spreadsheet*. Berikut ini adalah neraca saldo CV. EXPRESS pada tanggal 30 November 2015:

CV. EXPRESS  
NERACA SALDO  
Per 30 November 2015

No. Akun	Nama Akun	Saldo	
		Debet	Kredit
<b>100</b>	<b>Aktiva</b>		
<b>110</b>	<b>Aktiva Lancar</b>		
111	Kas	Rp 30.000.000,00	
112	Kas Kecil	Rp 500.000,00	
113	Piutang Usaha	Rp 2.000.000,00	
114	Iklan Dibayar di Muka	Rp 1.200.000,00	
115	Sewa Dibayar di Muka	Rp 400.000,00	
116	Perlengkapan	Rp 600.000,00	
<b>120</b>	<b>Aktiva Tetap</b>		
121	Peralatan	Rp 1.500.000,00	
122	Akumulasi Penyusutan Peralatan		Rp 240.000,00
123	Gedung	Rp 34.000.000,00	
124	Akumulasi Penyusutan Gedung		Rp 1.400.000,00
<b>200</b>	<b>Kewajiban</b>		
<b>210</b>	<b>Kewajiban Jangka Pendek</b>		
211	Utang Usaha		Rp 6.000.000,00
212	Utang Gaji		Rp 1.200.000,00
<b>220</b>	<b>Kewajiban Jangka Panjang</b>		
221	Utang Bank		
<b>300</b>	<b>Modal</b>		
311	Modal Putra		Rp 45.380.000,00
312	Prive Putra	Rp 200.000,00	
<b>400</b>	<b>Pendapatan</b>		
411	Pendapatan Jasa		Rp 20.000.000,00
<b>500</b>	<b>Beban</b>		
511	Beban Gaji	Rp 3.100.000,00	
512	Beban Pemeliharaan	Rp 400.000,00	
513	Beban Asuransi	Rp 320.000,00	
514	Beban Penyusutan Peralatan		
515	Beban Penyusutan Gedung		
516	Beban Perlengkapan		
517	Beban Sewa		
518	Beban Iklan		
519	Beban Utilitas		
520	Beban Kebersihan		
521	Beban Lain-lain		
<b>Jumlah</b>		<b>Rp 74.220.000,00</b>	<b>Rp 74.220.000,00</b>

Transaksi yang terjadi selama Bulan Desember 2015 adalah sebagai berikut:

- Tanggal 2, Meminjam uang di Bank Mitra sebesar Rp 30.000.000,00 dengan jangka waktu 2 tahun.
- Tanggal 5, Diterima cek dari Tuan Hermawan atas pelunasan piutang bulan lalu sebesar Rp 2.400.000,00.
- Tanggal 8, Dibeli perlengkapan secara kredit seharga Rp 3.100.000,00 dari UD. Sentosa.
- Tanggal 12, Dikeluarkan kas kecil (sistem dana tidak tetap/fluktuasi) untuk pengecetan gedung kantor sebesar Rp 150.000,00 (beban lain-lain).
- Tanggal 13, Penerimaan jasa pengiriman barang sebesar Rp 9.000.000,00 secara tunai.
- Tanggal 17, Dibayar hutang gaji karyawan bulan lalu sebesar Rp 1.200.000,00.
- Tanggal 21, Mengirimkan barang milik Tuan Sony namun biaya pengiriman baru akan dilunasi 2 minggu kemudian sebesar Rp 3.500.000,00.
- Tanggal 25, Dikeluarkan cek untuk pembayaran rekening air, listrik, dan telepon (beban utilitas) sebesar Rp 1.400.000,00.
- Tanggal 28, Penerimaan pendapatan jasa sebesar Rp 3.440.000,00 secara tunai.
- Tanggal 30, Dikeluarkan kas kecil untuk beban kebersihan sebesar Rp 120.000,00.

Data penyesuaian pada tanggal 31 Desember 2015 adalah sebagai berikut:

1. Beban penyusutan peralatan ditaksir sebesar 10% dari harga perolehan
2. Beban penyusutan gedung ditaksir sebesar 5% dari harga perolehan.
3. Iklan dibayar di muka yang telah terpakai adalah Rp 600.000,00.
4. Sewa yang telah jatuh tempo bulan Desember sebesar Rp 200.000,00.
5. Setelah dilakukan pengecekan fisik terhadap perlengkapan, diketahui sisa perlengkapan sebesar Rp 2.000.000,00.

Dari data di atas, Anda sebagai akuntan di CV. EXPRESS diminta untuk:

1. Mencatat transaksi ke dalam Jurnal Umum.
2. Membuat Buku Besar.

3. Membuat Neraca Saldo per 31 Desember 2015.
4. Membuat Jurnal Penyesuaian.
5. Membuat Neraca Lajur per 31 Desember 2015.
6. Membuat Laporan Keuangan yang terdiri dari Laporan Laba/Rugi, Laporan Perubahan Modal, dan Neraca.

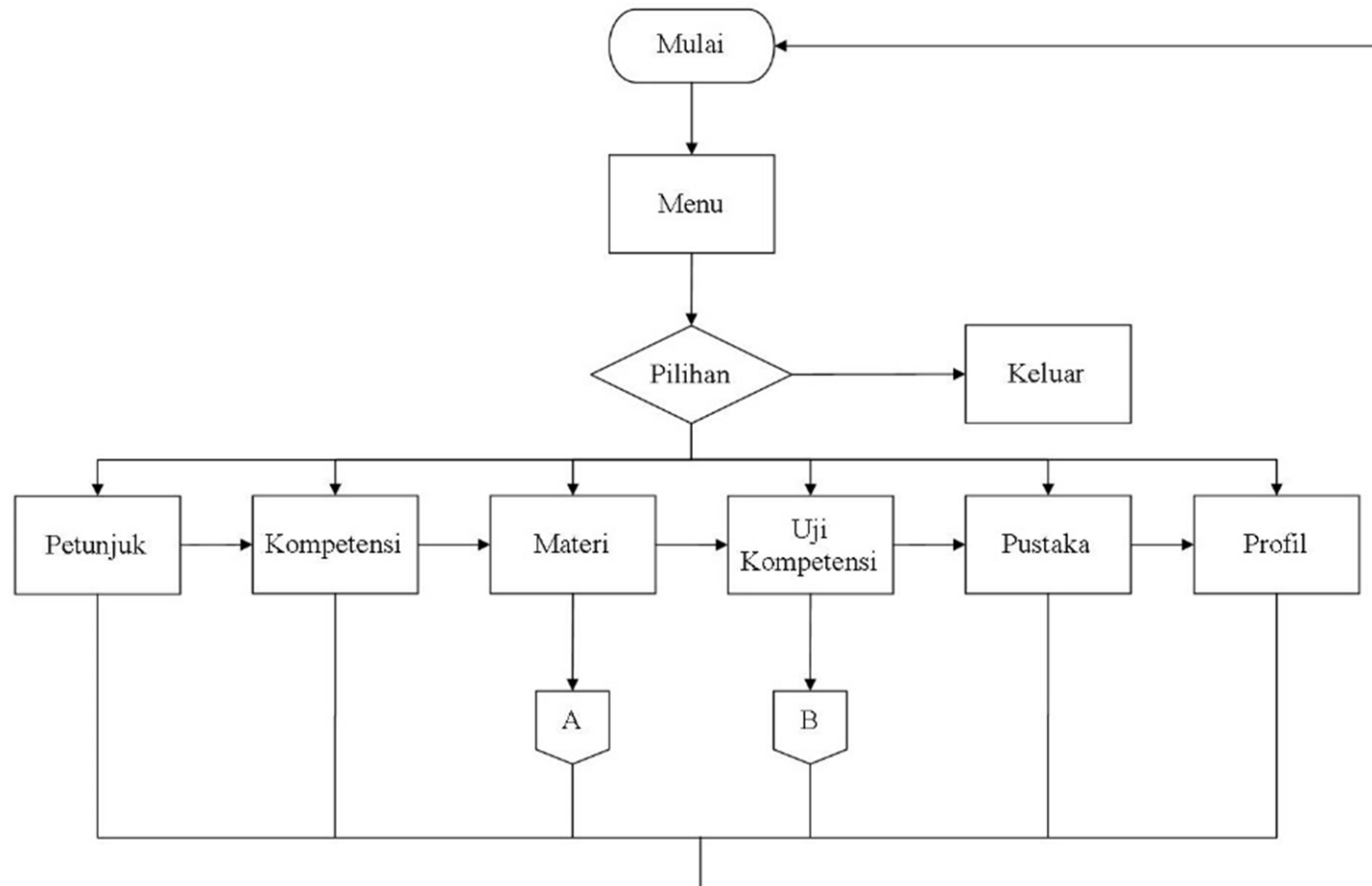
#### **E. REFERENSI**

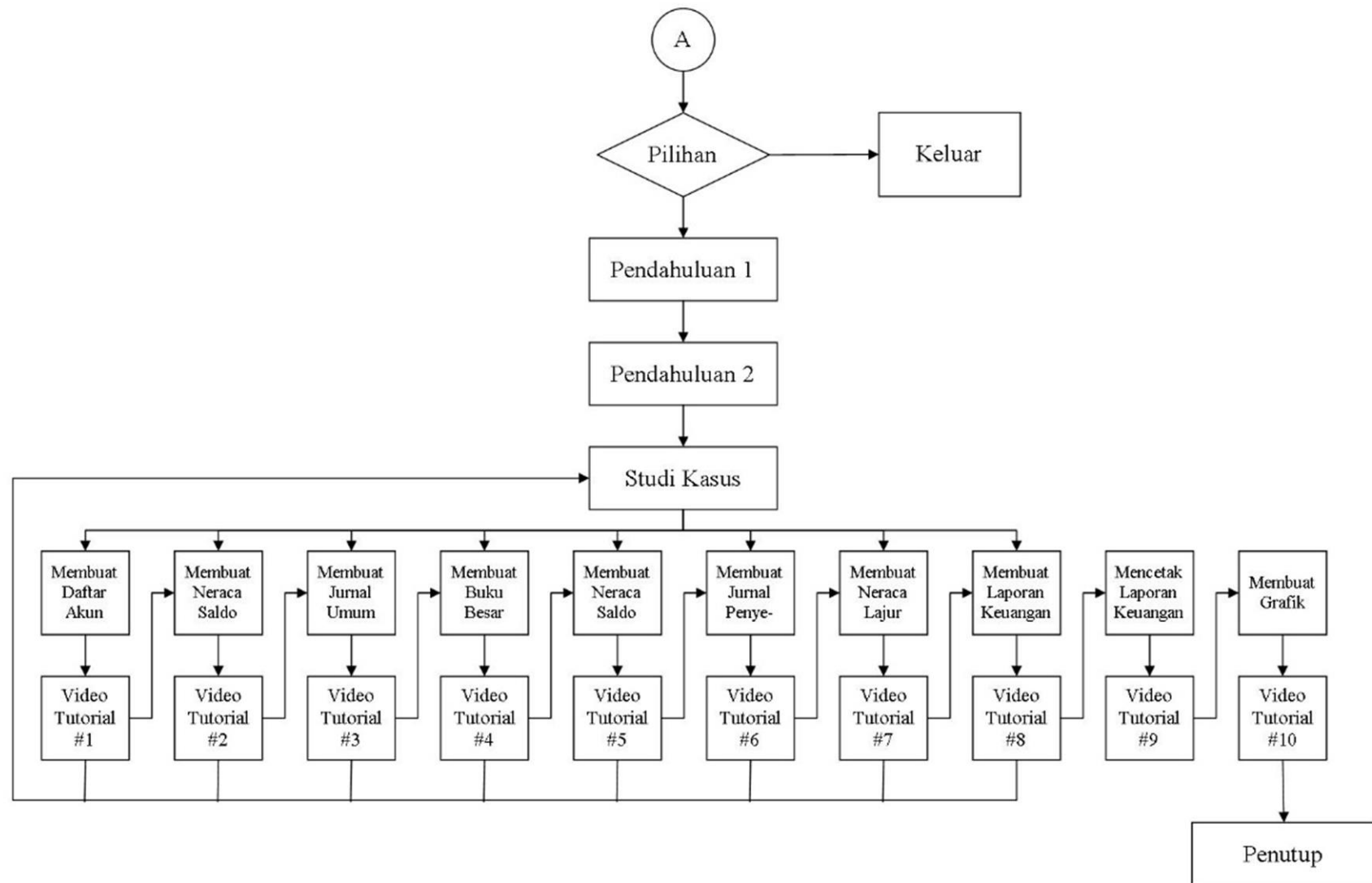
1. Al Haryono Jusup. 2011. *Dasar-Dasar Akuntansi Jilid 1*. Yogyakarta: Bagian Penerbitan STIE YKPN.
2. Angga Bahriyanata Perdana. 2015. *Aplikasi Komputer Akuntansi Spreadsheet/Pengolah Angka Excel 2007*. Yogyakarta: AB Publisher.
3. Deky Noviar, Bimo Suciono. 2013. *Modul Mengoperasikan Paket Program Pengolah Angka/Spreadsheet untuk SMK dan MAK*. Jakarta: Erlangga.
4. Muttakin Khoiruddin dan Darsono. 2012. *Penggunaan Aplikasi Spreadsheet dalam Akuntansi untuk SMK Kompetensi Keahlian Akuntansi*. Bandung: Armico.

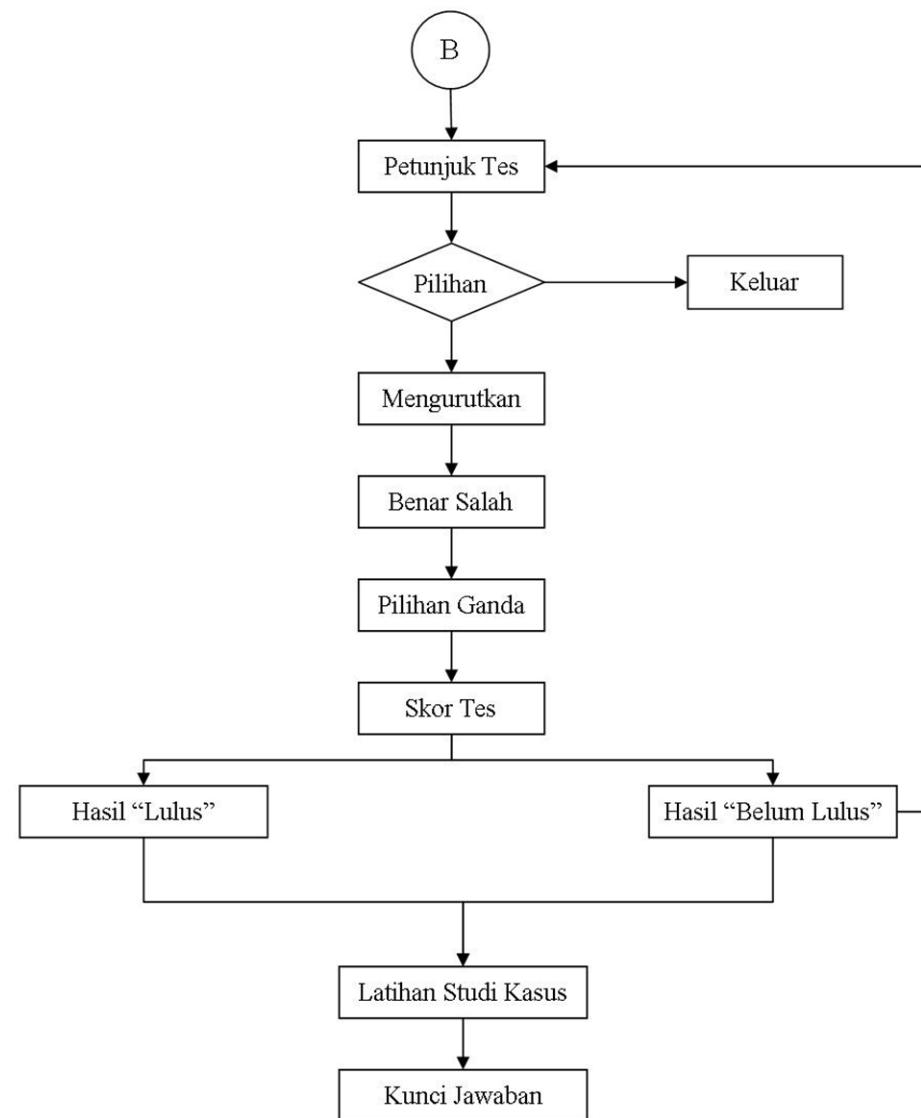
Sumber Gambar: [www.freepik.com](http://www.freepik.com)

#### **F. PROFIL**

Nama	: Rini Purnawati
NIM	: 13803241071
Program Studi	: Pendidikan Akuntansi
Almamater	: Universitas Negeri Yogyakarta
Software	: Lectora Inspire 12
Dosen Pembimbing	: Prof. Sukirno, Ph.D.
NIP	: 19690414 199403 1 002
Jurusan	: Pendidikan Akuntansi

**APPENDIX 1.d. Flowchart**

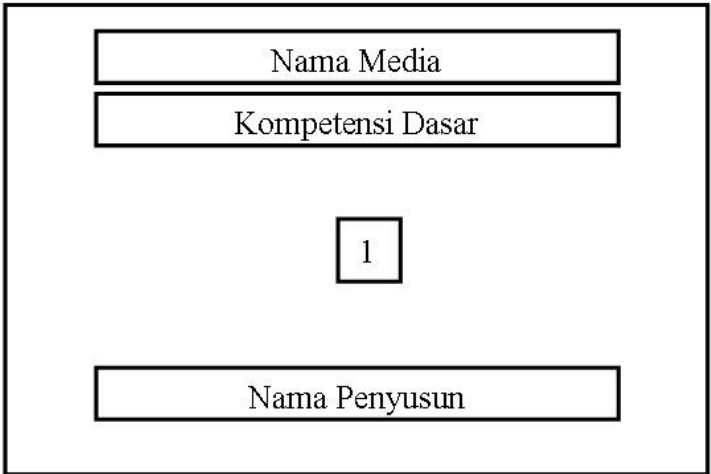




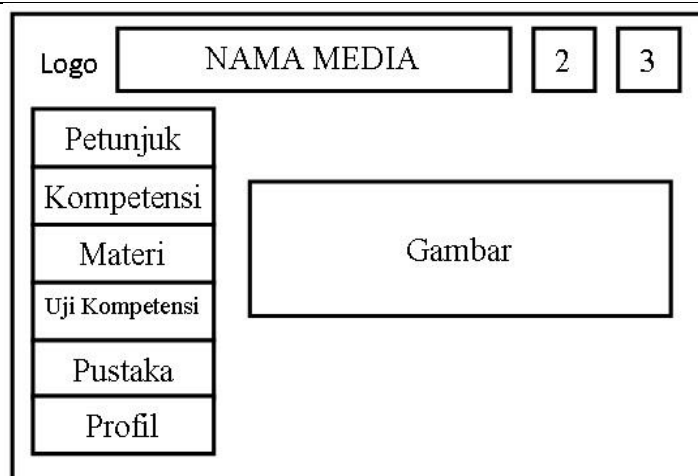


## APPENDIX 1.e. Storyboard

### 1. Halaman Pembuka/*Preface*

	<p><b>Keterangan Teks</b> Halaman <i>preface</i> berisi mengenai pengenalan modul interaktif berupa judul modul interaktif, kompetensi dasar, dan nama pengembang.</p> <p><b>Keterangan Gambar dan Audio</b> Audio : <i>backsound</i> sebagai musik pengiring</p> <p><b>Keterangan Navigasi</b> Tombol 1 : Untuk memulai menjalankan modul interaktif</p>
---	---

## 2. Halaman Awal/Menu



### Keterangan Teks

Nama Media : “Modul Pembelajaran Interaktif”

### Keterangan Gambar dan Audio

Gambar : cover media

Logo : logo UNY

Audio : *backsound* sebagai musik pengiring

### Keterangan Navigasi

#### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

#### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

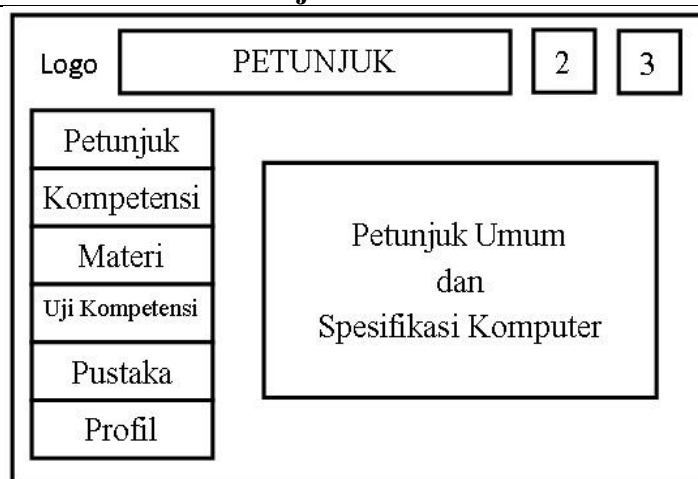
Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

### 3. Halaman Petunjuk



#### Keterangan Teks

Menu : Petunjuk

Petunjuk Umum : penjelasan petunjuk penggunaan modul interaktif

Spesifikasi Komputer : penjelasan spesifikasi komputer yang dibutuhkan untuk menjalankan program

#### Keterangan Gambar dan Audio

Logo : logo UNY

Audio : *backsound* sebagai musik pengiring

#### Keterangan Navigasi

##### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

##### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

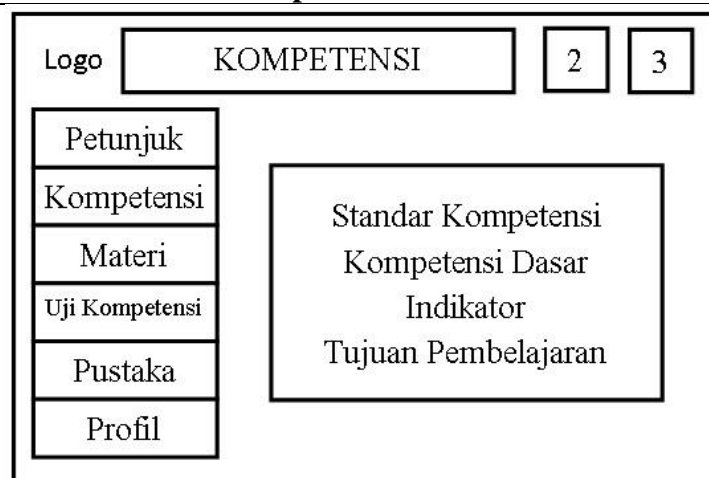
Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

#### 4. Halaman Kompetensi



##### Keterangan Teks

Menu : Kompetensi

Kompetensi : berisi penjelasan mengenai standar kompetensi, kompetensi dasar, indikator, dan tujuan pembelajaran

##### Keterangan Gambar dan Audio

Logo : logo UNY

Audio : *backsound* sebagai musik pengiring

##### Keterangan Navigasi

##### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

##### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

### 5. Halaman Materi : Pendahuluan

Logo	MATERI	2	3	4	5
Pendahuluan Materi 1					

Logo	MATERI	2	3	4
Pendahuluan Materi 2				
<div style="border: 1px solid black; padding: 2px 10px;">6</div>				

#### Keterangan Teks

Menu : Materi

Pendahuluan Materi 1 : berisi gambaran dan ruang lingkup materi

Pendahuluan Materi 2 : berisi pengantar menuju studi kasus

#### Keterangan Gambar dan Audio

Logo : logo UNY

Audio : *background* sebagai musik pengiring

#### Keterangan Navigasi

Tombol 2 : untuk keluar dari program

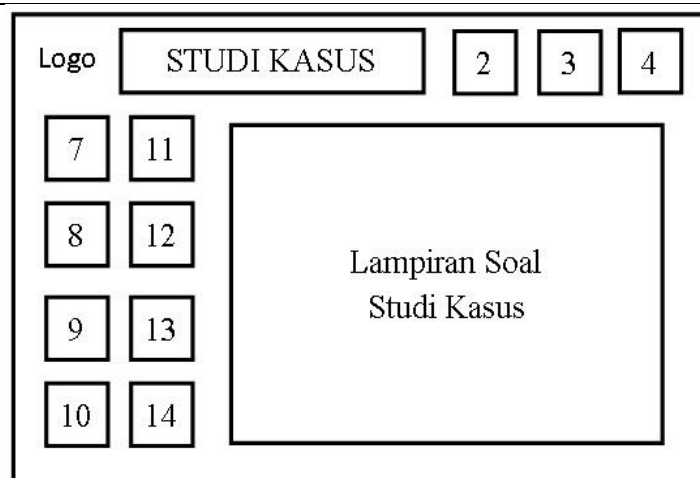
Tombol 3 : untuk menuju ke halaman pembuka

Tombol 4 : untuk kembali ke halaman sebelumnya

Tombol 5 : untuk menuju ke halaman selanjutnya

Tombol 6 : untuk menuju ke halaman studi kasus

## 6. Halaman Materi : Studi Kasus CV. MEDIA



### Keterangan Teks

Sub Menu : Studi Kasus

Lampiran Soal Studi Kasus : berisi soal yang akan dibahas dalam modul

### Keterangan Gambar dan Audio

Logo : logo UNY

### Keterangan Navigasi

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

Tombol 4 : untuk kembali ke halaman sebelumnya

Tombol 7 : untuk menuju halaman materi "Membuat Daftar Akun"

Tombol 8 : untuk menuju halaman materi "Membuat Neraca Saldo Awal"

Tombol 9 : untuk menuju halaman materi "Membuat Jurnal Umum"

Tombol 10 : untuk menuju halaman materi "Membuat Buku Besar"

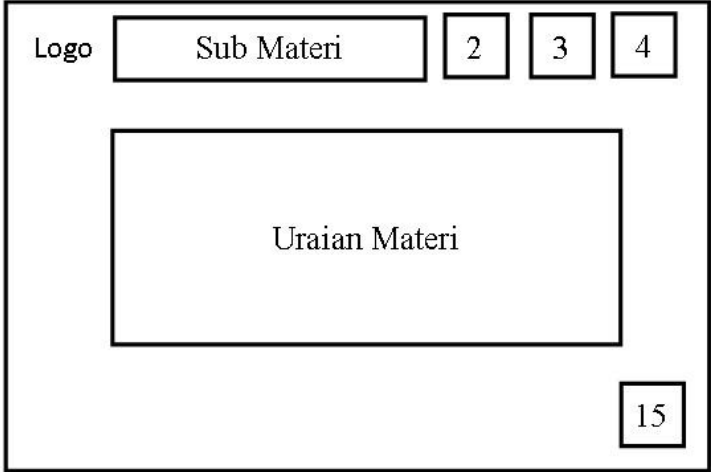
Tombol 11 : untuk menuju halaman materi "Membuat Neraca Saldo"

Tombol 12 : untuk menuju halaman materi "Membuat Jurnal Penyesuaian"

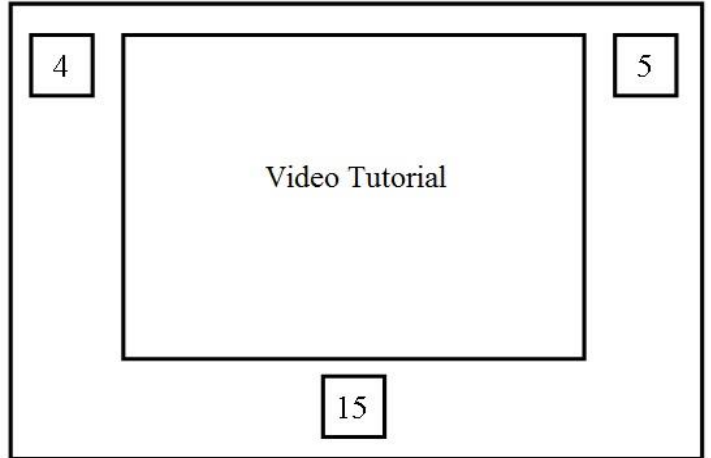
Tombol 13 : untuk menuju halaman materi "Membuat Neraca Lajur"

Tombol 14 : untuk menuju halaman materi "Membuat Laporan Keuangan"


### 7. Halaman Materi : Uraian Materi

	<p><b>Keterangan Teks</b>  Sub Materi : judul sub materi  Uraian Materi : penjelasan secara ringkas dari sub materi</p> <p><b>Keterangan Gambar dan Audio</b>  Logo : logo UNY</p> <p><b>Keterangan Navigasi</b>  Tombol 2 : untuk keluar dari program  Tombol 3 : untuk menuju ke halaman pembuka  Tombol 4 : untuk kembali ke halaman sebelumnya  Tombol 15 : untuk menuju ke halaman video tutorial</p>
---	--

### 8. Halaman Materi: Video Tutorial

	<p><b>Keterangan Teks</b>  Video Tutorial : video penjelasan sub materi</p> <p><b>Keterangan Gambar dan Audio</b>  -</p> <p><b>Keterangan Navigasi</b>  Tombol 4 : untuk kembali ke halaman sebelumnya  Tombol 5 : untuk menuju ke halaman selanjutnya  Tombol 15 : untuk menuju ke halaman studi kasus</p>
--	---

### 9. Halaman Uji Kompetensi: Petunjuk Tes

	<p><b>Keterangan Teks</b>  Menu : Uji Kompetensi  Petunjuk : berisi petunjuk mengerjakan soal uji kompetensi dan kegunaan tombol-tombol yang ada</p> <p><b>Keterangan Gambar dan Audio</b>  Logo : logo UNY  Audio : <i>background</i> sebagai musik pengiring</p> <p><b>Keterangan Navigasi</b>  Tombol 2 : untuk keluar dari program  Tombol 3 : untuk menuju ke halaman pembuka  Tombol 16 : untuk mulai mengerjakan uji kompetensi</p>
---	--



### 10. Halaman Uji Kompetensi: Tes

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>Nama Tes</span> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">3</div> </div> </div> <div style="border: 1px solid black; height: 100px; margin-top: 10px; display: flex; align-items: center; justify-content: center;"> Soal </div> <div style="display: flex; justify-content: flex-end; gap: 10px; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">17</div> <div style="border: 1px solid black; padding: 2px 5px;">18</div> <div style="border: 1px solid black; padding: 2px 5px;">19</div> </div> </div>
<div style="border: 1px solid black; padding: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>Nama Tes</span> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">3</div> </div> </div> <div style="border: 1px solid black; height: 100px; margin-top: 10px; display: flex; align-items: center; justify-content: center;"> Soal Terakhir </div> <div style="display: flex; justify-content: flex-end; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">20</div> </div> </div> </div>

#### Keterangan Teks

Nama Tes : berisi judul tes, yaitu Mengurutkan, Benar Salah, atau Pilihan Ganda

Soal : berisi soal yang harus dikerjakan

#### Keterangan Gambar dan Audio

Audio : *background* sebagai musik pengiring

#### Keterangan Navigasi

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

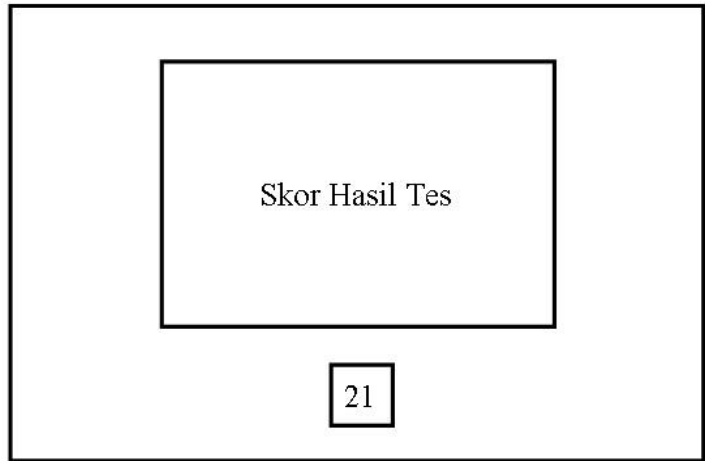
Tombol 17 : untuk membatalkan uji kompetensi

Tombol 18 : untuk kembali ke soal sebelumnya

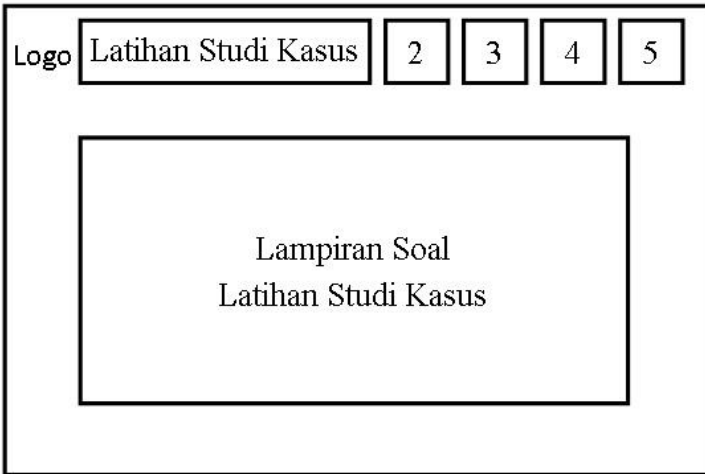
Tombol 19 : untuk menuju ke soal selanjutnya

Tombol 20 : untuk melihat skor hasil tes

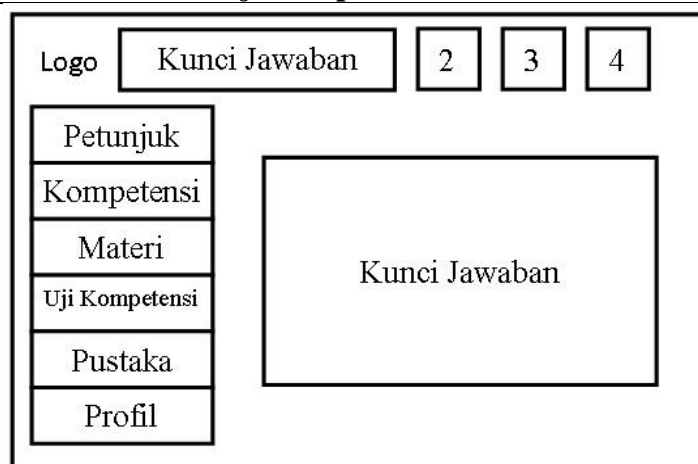
### 11. Halaman Uji Kompetensi: Hasil Tes

	<p><b>Keterangan Teks</b> Skor Hasil Tes : berisi jumlah skor yang diperoleh dan keterangan lulus</p> <p><b>Keterangan Gambar dan Audio</b> Audio : <i>background</i> sebagai musik pengiring</p> <p><b>Keterangan Navigasi</b> Tombol 21 : untuk menuju ke halaman penutup tes</p>
---	---

### 12. Halaman Uji Kompetensi: Latihan Studi Kasus CV. EXPRESS

	<p><b>Keterangan Teks</b> Sub Menu : Latihan Studi Kasus Latihan Soal : studi kasus untuk dapat dikerjakan siswa sebagai latihan</p> <p><b>Keterangan Gambar dan Audio</b> Logo : logo UNY Audio : <i>background</i> sebagai musik pengiring</p> <p><b>Keterangan Navigasi</b> Tombol 2 : untuk keluar dari program Tombol 3 : untuk menuju ke halaman pembuka Tombol 4 : untuk kembali ke halaman sebelumnya Tombol 5 : untuk menuju ke halaman selanjutnya</p>
--	--

### 13. Halaman Uji Kompetensi: Kunci Jawaban



#### Keterangan Teks

Sub Menu : Kunci Jawaban

Kunci Jawaban : berisi kunci jawaban latihan studi kasus dan link URL untuk mendownload kunci jawaban uji kompetensi

#### Keterangan Gambar, Animasi, dan Audio

Logo : logo UNY

Audio : *backsound* sebagai musik pengiring

#### Keterangan Navigasi

##### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

Tombol 4 : untuk kembali ke halaman sebelumnya

##### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

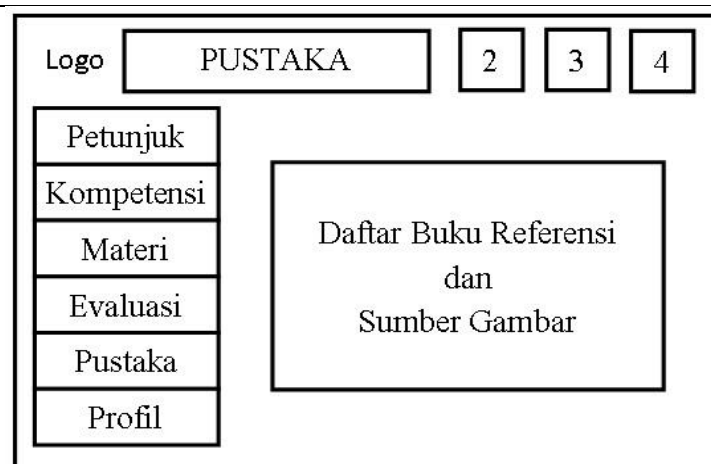
Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

#### 14. Halaman Pustaka



#### Keterangan Teks

Menu : Pustaka

Pustaka : daftar buku yang digunakan sebagai referensi dan sumber gambar

#### Keterangan Gambar dan Audio

Logo : logo UNY

Audio : *backsound* sebagai musik pengiring

#### Keterangan Navigasi

##### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

Tombol 4 : untuk kembali ke halaman sebelumnya

##### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

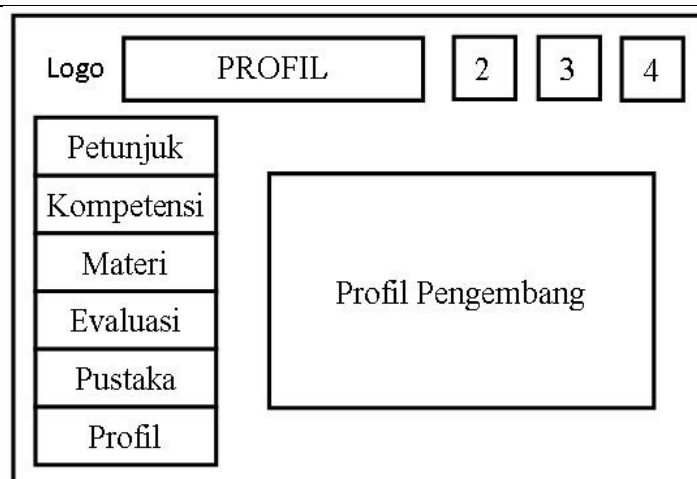
Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

### 15. Halaman Profil



#### Keterangan Teks

Menu : Profil

Profil : berisi biodata pengembang dan dosen pembimbing

#### Keterangan Gambar, Animasi, dan Audio

Logo : logo UNY

Audio : *background* sebagai musik pengiring

#### Keterangan Navigasi

##### Tombol

Tombol 2 : untuk keluar dari program

Tombol 3 : untuk menuju ke halaman pembuka

Tombol 4 : untuk kembali ke halaman sebelumnya

##### Menu Utama

Petunjuk : untuk menuju ke halaman petunjuk

Kompetensi : untuk menuju ke halaman kompetensi

Materi : untuk menuju ke halaman materi

Uji Kompetensi : untuk menuju ke halaman uji kompetensi

Pustaka : untuk menuju ke halaman pustaka

Profil : untuk menuju ke halaman profil

## Appendix 1.f. Final Product

### A. Preface



### B. Cover



## C. Direction Page

### 1. Petunjuk Umum



### 2. Spesifikasi Komputer



## D. Competency Page

**KOMPETENSI**

**Standar Kompetensi**  
Mengoperasikan Paket Program Pengolah Angka/Spreadsheet

**Indikator**

1. Laporan keuangan dibuat dalam bentuk tabel.
2. Laporan keuangan dicetak dalam bentuk print out.
3. Laporan dibuat dalam bentuk grafik.

**Kompetensi Dasar**  
Membuat Laporan

**Tujuan Pembelajaran**

1. Siswa dapat mengerjakan siklus akuntansi perusahaan jasa dengan menggunakan paket program pengolah angka/spreadsheet sehingga dapat menghasilkan laporan keuangan.
2. Siswa dapat membuat laporan keuangan dalam bentuk tabel.
3. Siswa dapat mencetak laporan keuangan dalam bentuk print out.
4. Siswa dapat membuat laporan dalam bentuk grafik.

## E. Material Page

## 1. Introduction 1

**MATERI**

Kompetensi Dasar Membuat Laporan merupakan salah satu kompetensi yang harus dikuasai oleh siswa SMK pada Kompetensi Keahlian Akuntansi. Kompetensi ini berisi tentang materi Membuat Siklus Akuntansi Perusahaan Menggunakan Paket Program Pengolah Angka/Spreadsheet. Program pengolah angka yang digunakan adalah program Microsoft Excel 2010.

Materi yang dibahas dalam modul ini terdiri dari:

1. Membuat Siklus Akuntansi
  - a. Membuat Daftar Akun
  - b. Membuat Neraca Saldo Awal
  - c. Membuat Jurnal Umum
  - d. Membuat Buku Besar
  - e. Membuat Neraca Saldo
  - f. Membuat Jurnal Penyesuaian
  - g. Membuat Neraca Lajur
  - h. Membuat Laporan Keuangan
2. Mencetak Laporan Keuangan
3. Membuat Grafik



## 2. Introduction 2



**MATERI**

Modul ini membahas langkah-langkah pembuatan siklus akuntansi secara sederhana dengan pembahasan kasus perusahaan jasa. Simaklah Studi Kasus CV. Media.

Studi Kasus CV. Media

## 3. Case Study



**Studi Kasus CV. MEDIA**

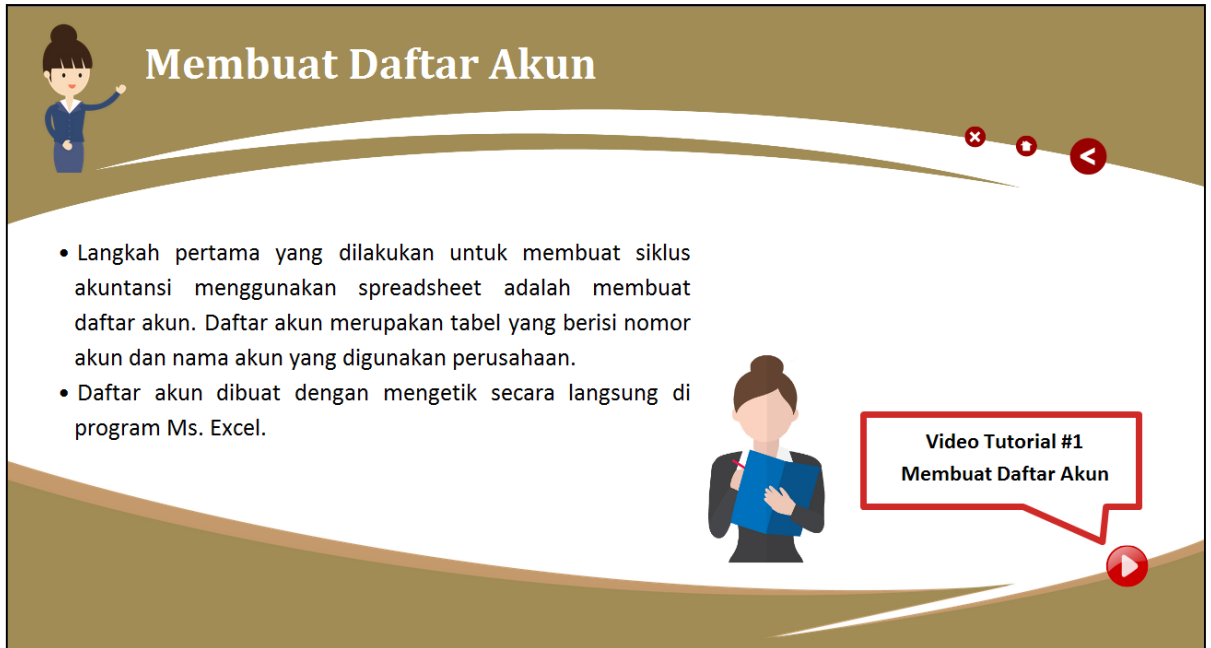
1. Membuat Daftar Akun
2. Membuat Neraca Saldo Awal
3. Membuat Jurnal Umum
4. Membuat Buku Besar
5. Membuat Neraca Saldo
6. Membuat Jurnal Penyesuaian
7. Membuat Neraca Lajur
8. Membuat Laporan Keuangan

CV. MEDIA adalah perusahaan yang bergerak dalam bidang jasa periklanan. Adapun neraca saldo yang dimiliki CV. MEDIA periode 30 November 2015 adalah sebagai berikut:

**CV. MEDIA**  
**Neraca Saldo**  
**Per 30 November 2015**

No. Akun	Nama Akun	Saldo	
		Debet	Kredit
1000	Aktiva		
1100	Aktiva Lancar		
1101	Kas	Rp 27.500.000,00	
1102	Piutang Usaha	Rp 12.300.000,00	
1103	Asuransi Dibayar di Muka	Rp 18.000.000,00	
1104	Iklan Dibayar di Muka		
1105	Perlengkapan	Rp 4.800.000,00	
1200	Aktiva Tetap		

#### 4. Membuat Daftar Akun



**Membuat Daftar Akun**

- Langkah pertama yang dilakukan untuk membuat siklus akuntansi menggunakan spreadsheet adalah membuat daftar akun. Daftar akun merupakan tabel yang berisi nomor akun dan nama akun yang digunakan perusahaan.
- Daftar akun dibuat dengan mengetik secara langsung di program Ms. Excel.

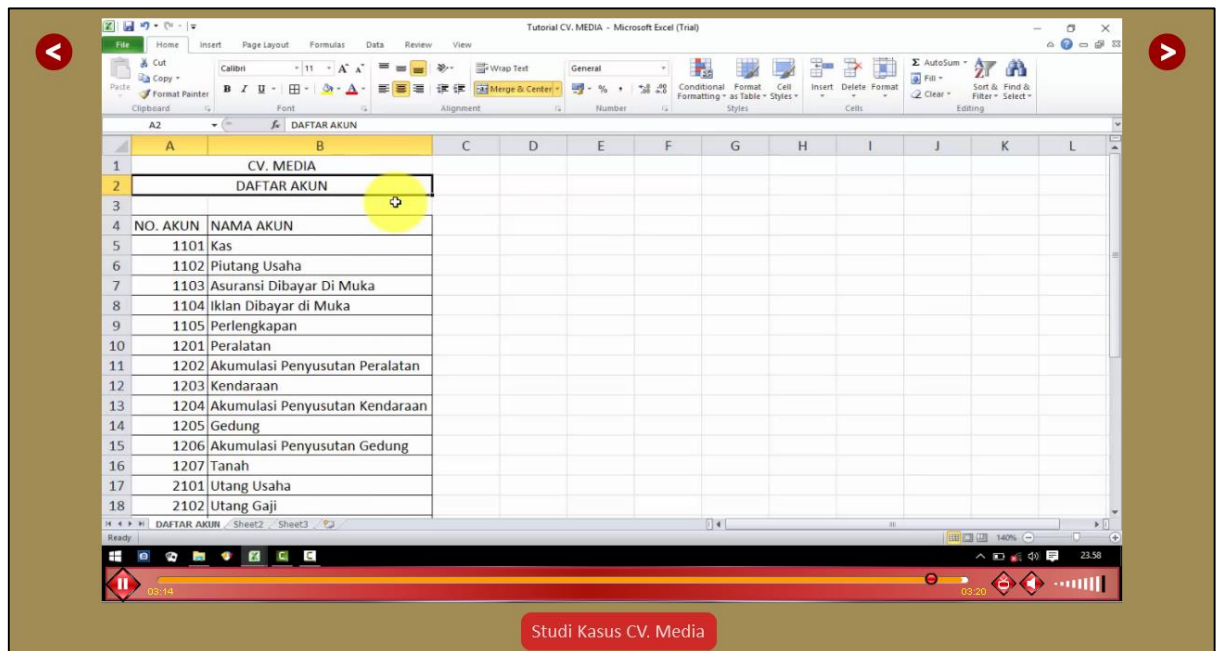
Video Tutorial #1  
Membuat Daftar Akun

#### 5. Video Tutorial #1 Membuat Daftar Akun




**Video Tutorial Spreadsheet #1  
Membuat Daftar Akun**


Studi Kasus CV. Media



## 6. Membuat Neraca Saldo Awal



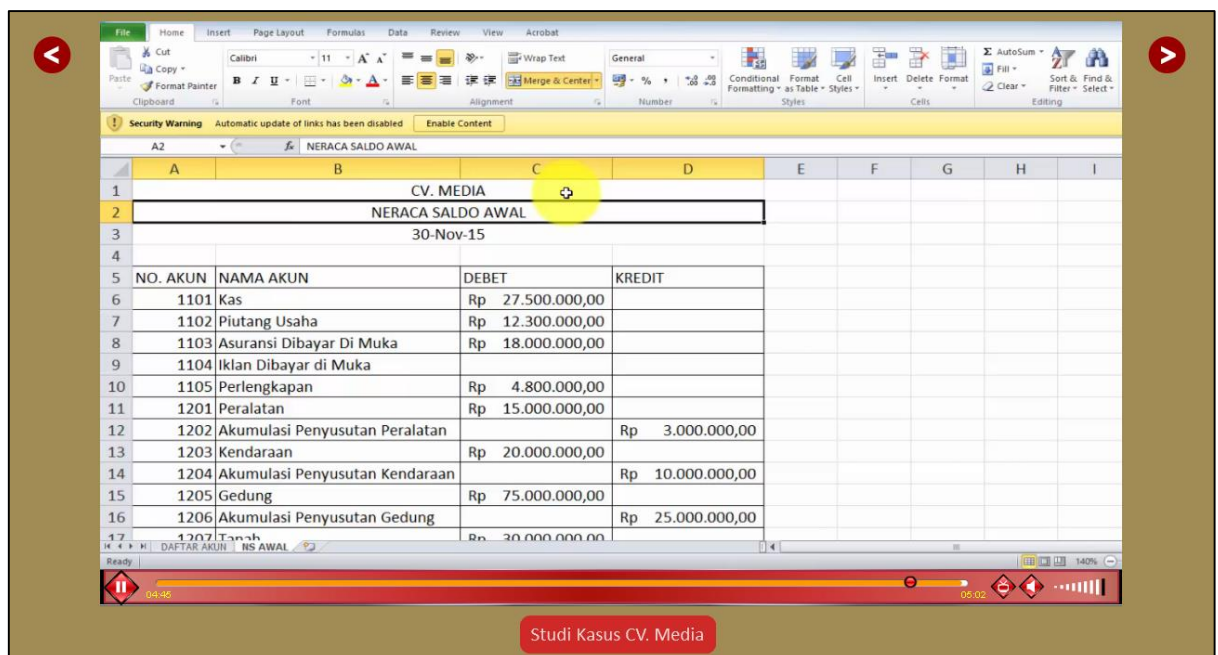
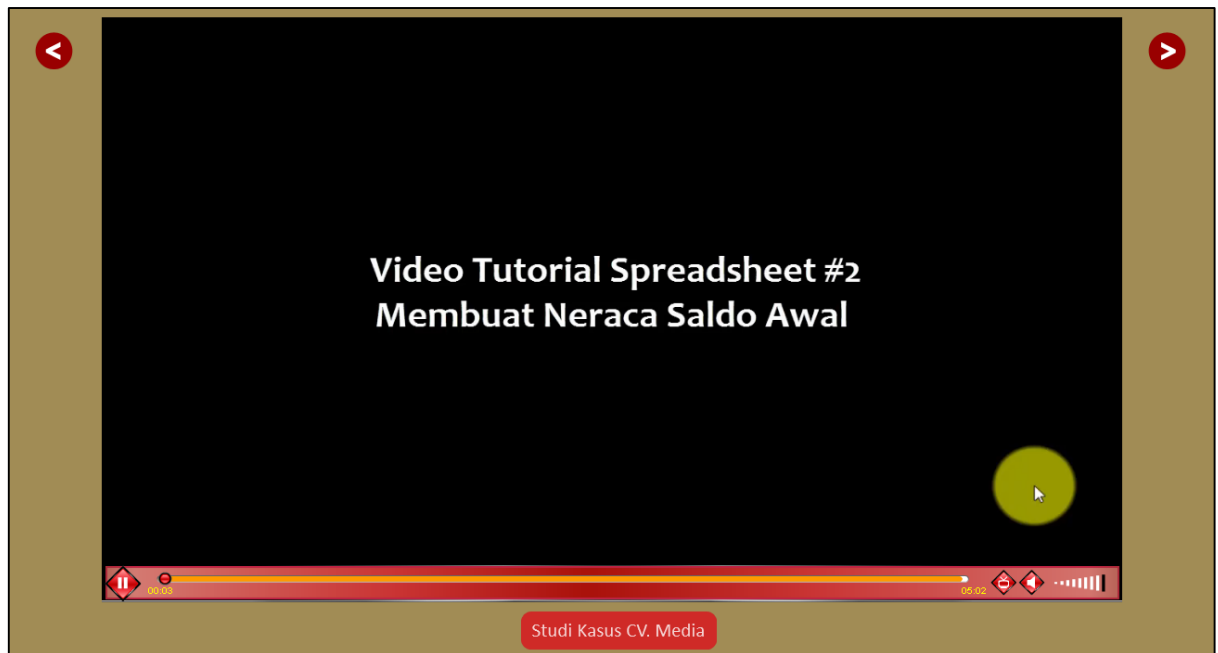
# Membuat Neraca Saldo Awal



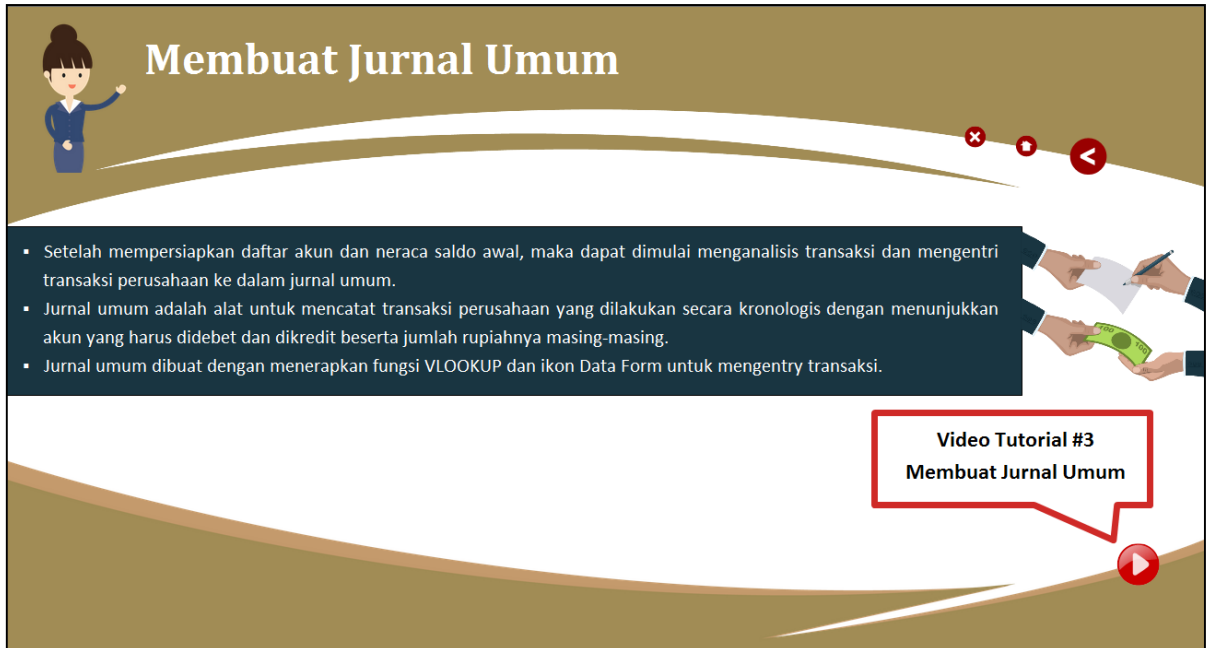
- Neraca saldo awal adalah daftar yang berisi saldo-saldo dari seluruh akun yang digunakan perusahaan pada suatu saat tertentu (tanggal tertentu), sebelum dimulainya pembukuan periode baru.
- Neraca saldo dapat dibuat dengan cara mengcopy daftar akun dan menambahkan kolom saldo debit dan kredit.

**Video Tutorial #2**  
**Membuat Neraca Saldo Awal**

## 7. Video Tutorial #2 Membuat Neraca Saldo Awal



## 8. Membuat Jurnal Umum

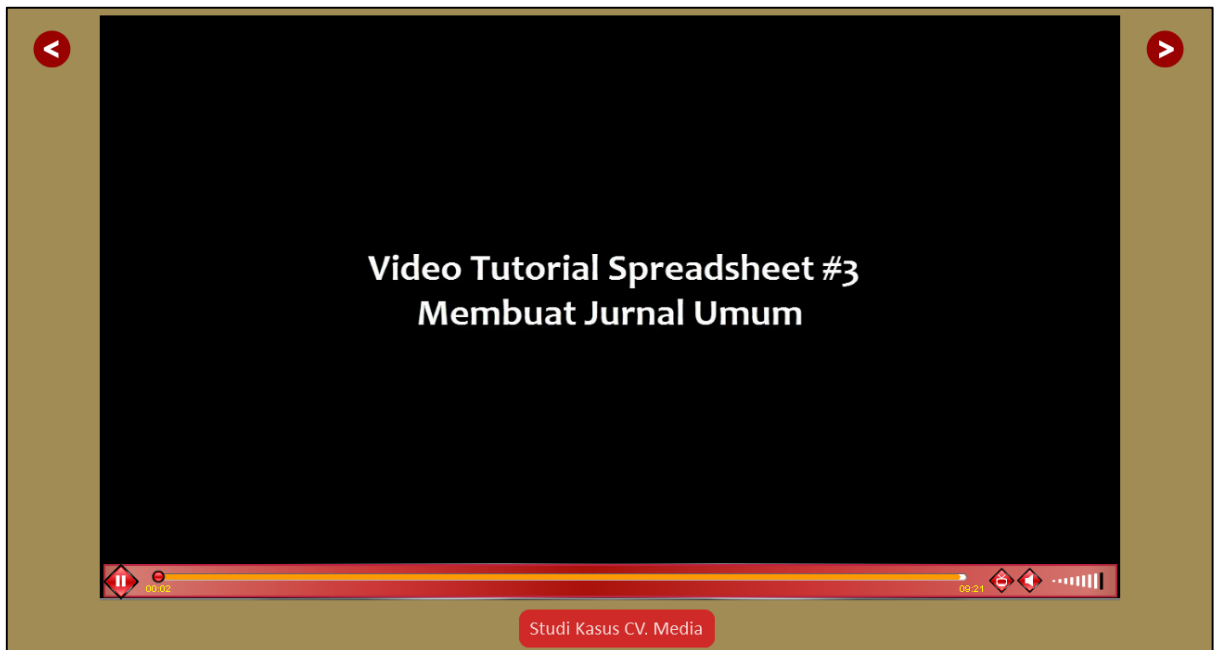


**Membuat Jurnal Umum**

- Setelah mempersiapkan daftar akun dan neraca saldo awal, maka dapat dimulai menganalisis transaksi dan mengentri transaksi perusahaan ke dalam jurnal umum.
- Jurnal umum adalah alat untuk mencatat transaksi perusahaan yang dilakukan secara kronologis dengan menunjukkan akun yang harus didebet dan dikredit beserta jumlah rupiahnya masing-masing.
- Jurnal umum dibuat dengan menerapkan fungsi VLOOKUP dan ikon Data Form untuk mengentry transaksi.

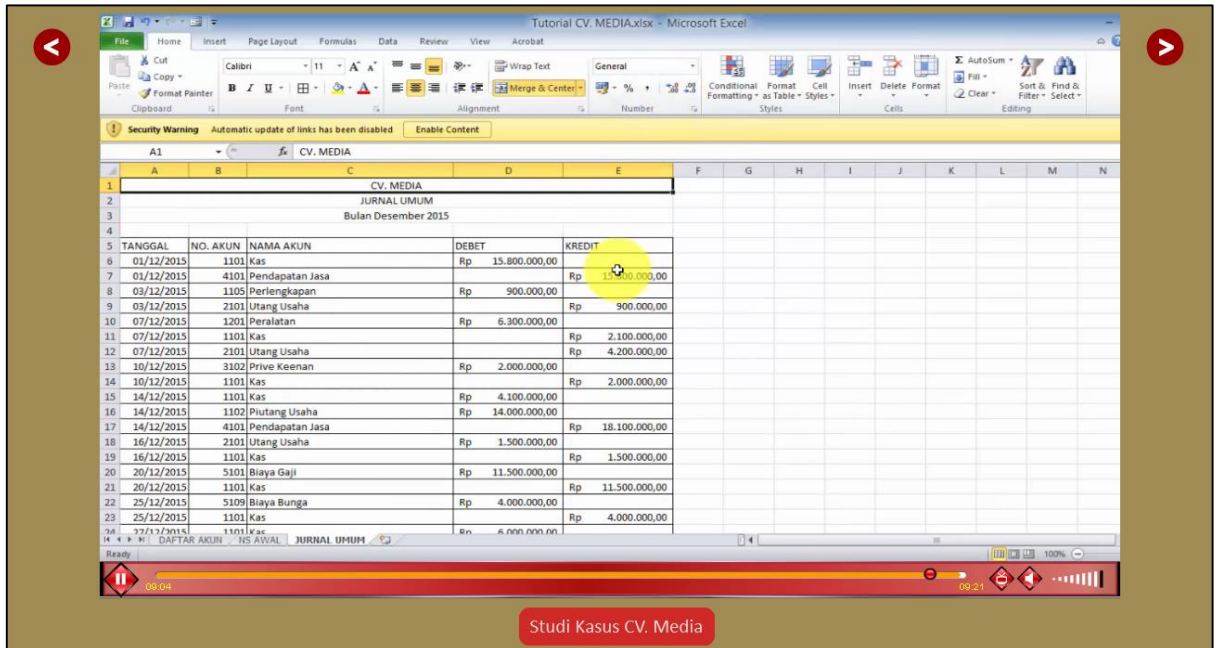
**Video Tutorial #3  
Membuat Jurnal Umum**

## 9. Video Tutorial #3 Membuat Jurnal Umum



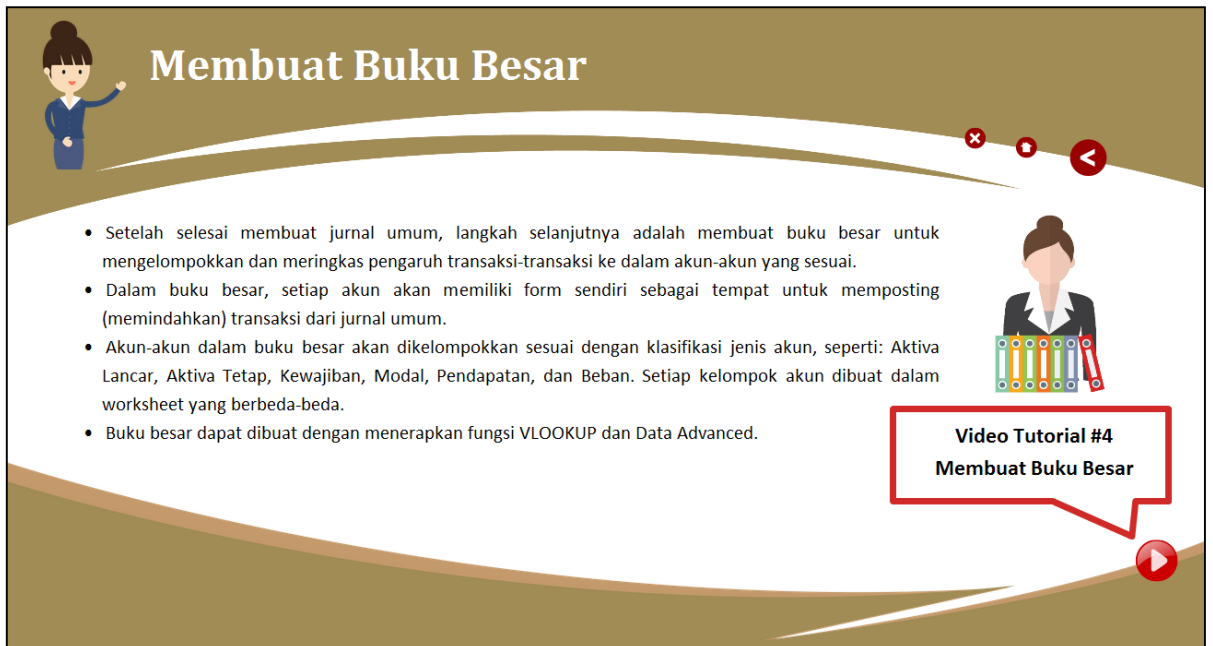
**Video Tutorial Spreadsheet #3  
Membuat Jurnal Umum**

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Studi Kasus CV. Media

## 10. Membuat Buku Besar

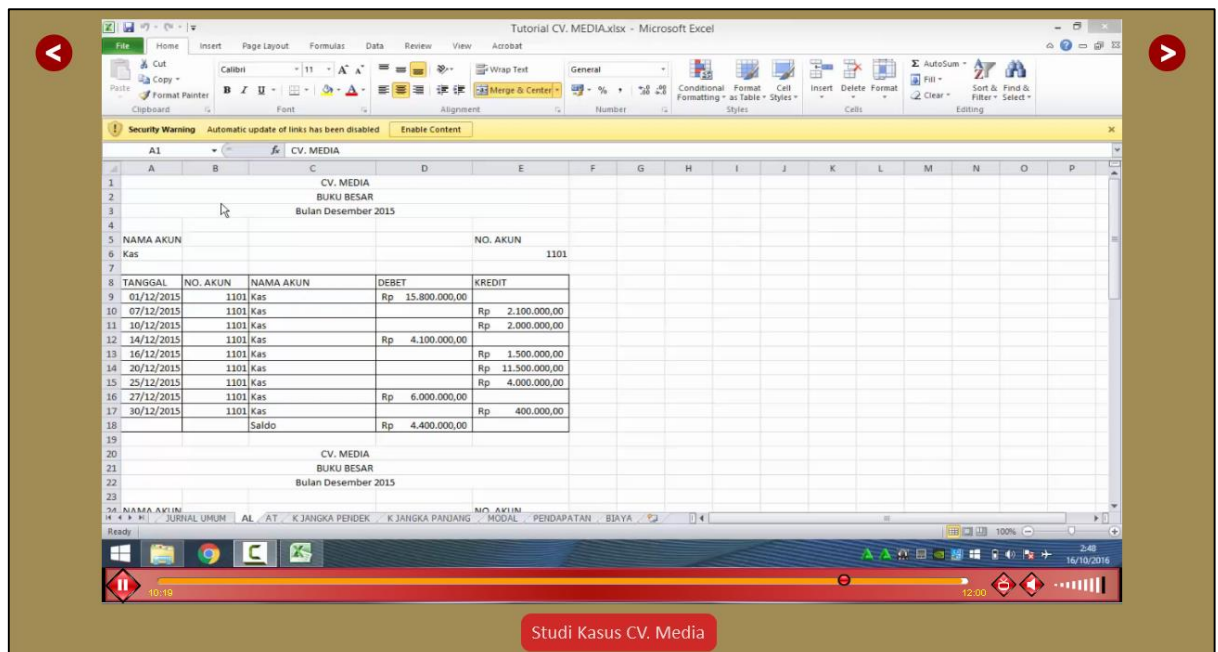


### Membuat Buku Besar

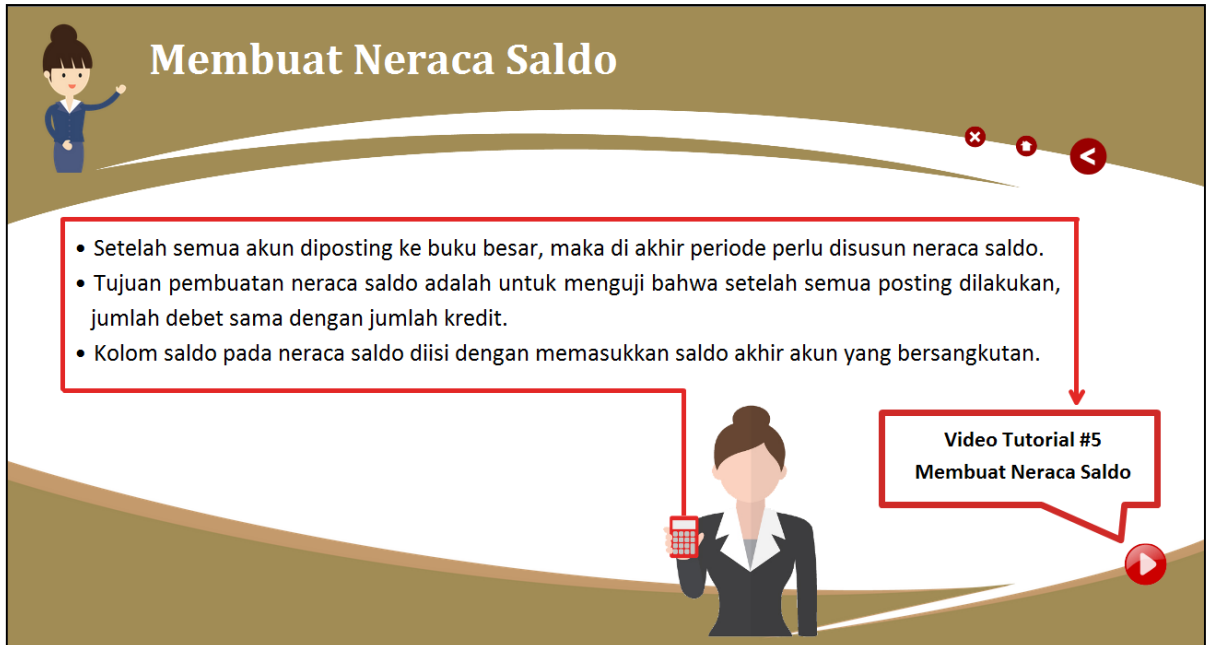
- Setelah selesai membuat jurnal umum, langkah selanjutnya adalah membuat buku besar untuk mengelompokkan dan meringkas pengaruh transaksi-transaksi ke dalam akun-akun yang sesuai.
- Dalam buku besar, setiap akun akan memiliki form sendiri sebagai tempat untuk memposting (memindahkan) transaksi dari jurnal umum.
- Akun-akun dalam buku besar akan dikelompokkan sesuai dengan klasifikasi jenis akun, seperti: Aktiva Lancar, Aktiva Tetap, Kewajiban, Modal, Pendapatan, dan Beban. Setiap kelompok akun dibuat dalam worksheet yang berbeda-beda.
- Buku besar dapat dibuat dengan menerapkan fungsi VLOOKUP dan Data Advanced.

Video Tutorial #4  
Membuat Buku Besar

## 11. Video Tutorial #4 Membuat Buku Besar



## 12. Membuat Neraca Saldo



**Membuat Neraca Saldo**

- Setelah semua akun diposting ke buku besar, maka di akhir periode perlu disusun neraca saldo.
- Tujuan pembuatan neraca saldo adalah untuk menguji bahwa setelah semua posting dilakukan, jumlah debit sama dengan jumlah kredit.
- Kolom saldo pada neraca saldo diisi dengan memasukkan saldo akhir akun yang bersangkutan.

Video Tutorial #5  
Membuat Neraca Saldo

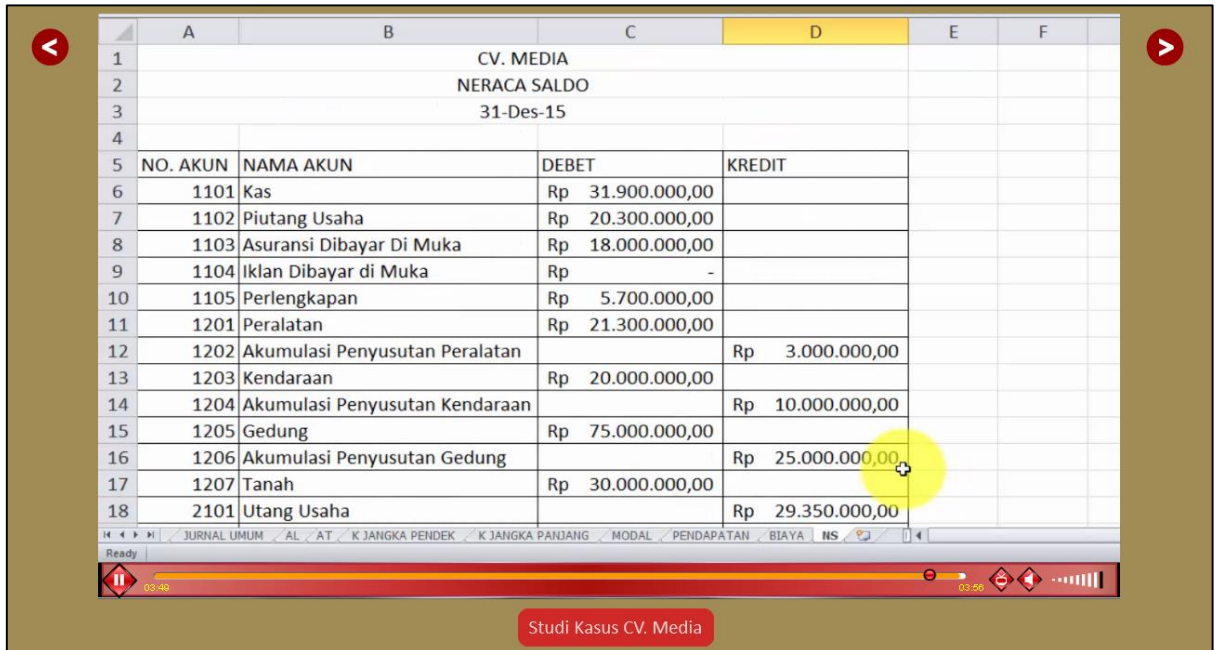
## 13. Video Tutorial #5 Membuat Neraca Saldo



**Video Tutorial Spreadsheet #5  
Membuat Neraca Saldo**

Studi Kasus CV. Media

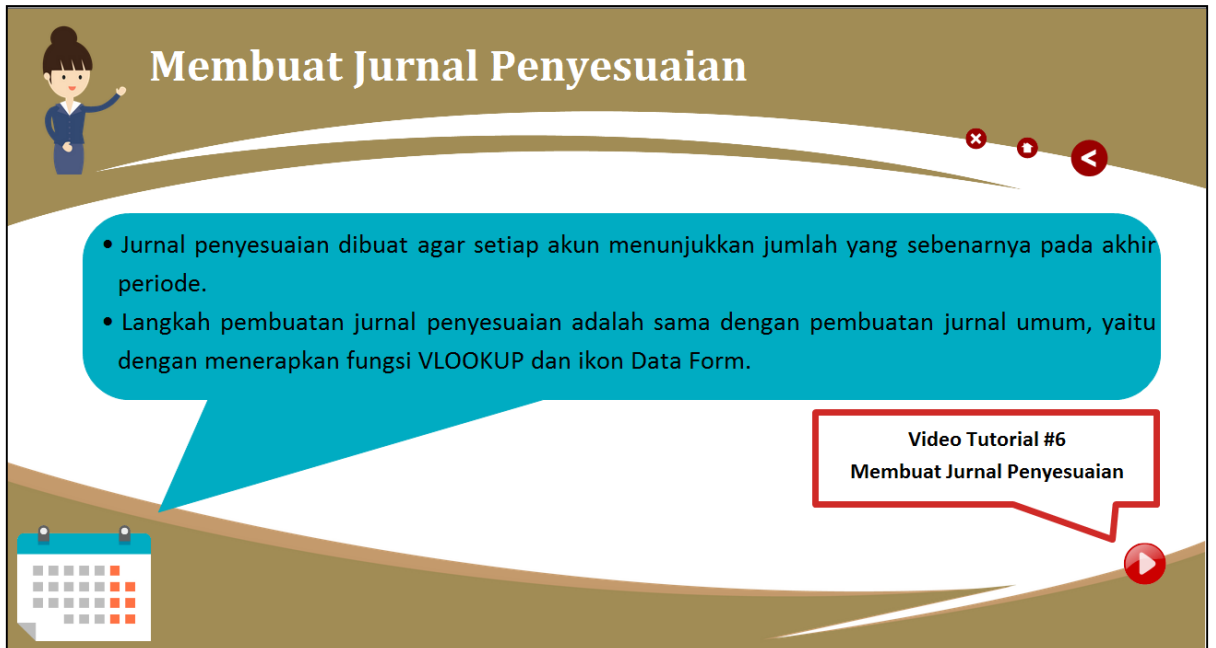




NO. AKUN	NAMA AKUN	DEBET	KREDIT
1101	Kas	Rp 31.900.000,00	
1102	Piutang Usaha	Rp 20.300.000,00	
1103	Asuransi Dibayar Di Muka	Rp 18.000.000,00	
1104	Iklan Dibayar di Muka	Rp -	
1105	Perlengkapan	Rp 5.700.000,00	
1201	Peralatan	Rp 21.300.000,00	
1202	Akumulasi Penyusutan Peralatan		Rp 3.000.000,00
1203	Kendaraan	Rp 20.000.000,00	
1204	Akumulasi Penyusutan Kendaraan		Rp 10.000.000,00
1205	Gedung	Rp 75.000.000,00	
1206	Akumulasi Penyusutan Gedung		Rp 25.000.000,00
1207	Tanah	Rp 30.000.000,00	
2101	Utang Usaha		Rp 29.350.000,00

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#### 14. Membuat Jurnal Penyesuaian

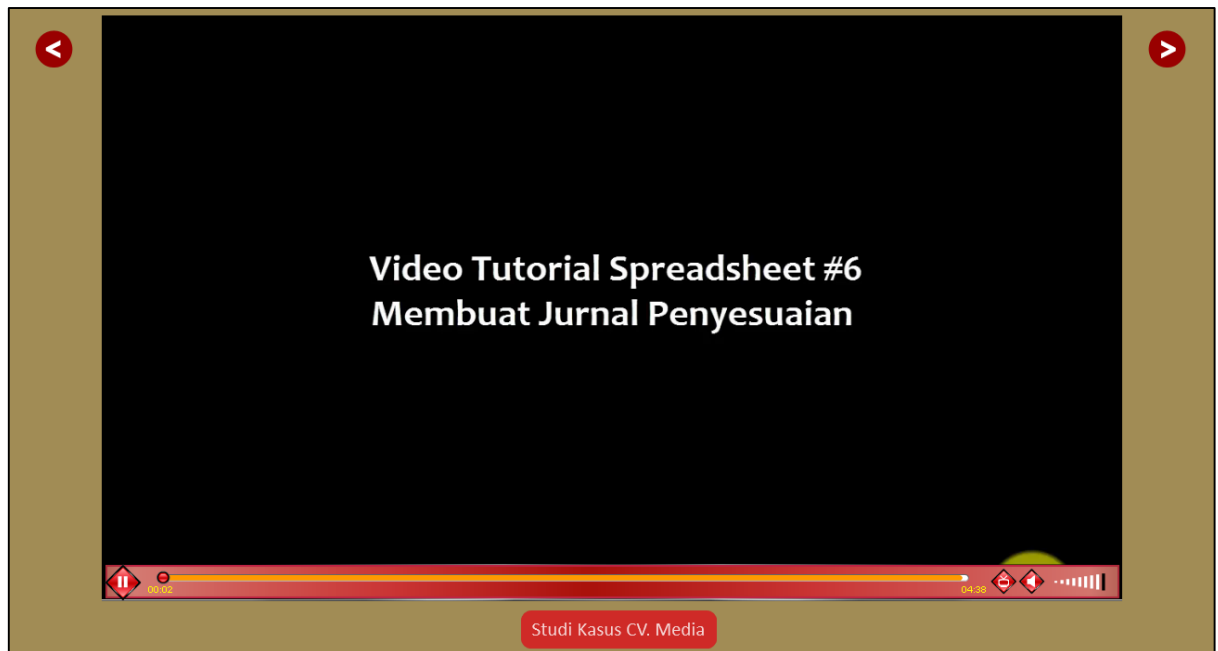


## Membuat Jurnal Penyesuaian

- Jurnal penyesuaian dibuat agar setiap akun menunjukkan jumlah yang sebenarnya pada akhir periode.
- Langkah pembuatan jurnal penyesuaian adalah sama dengan pembuatan jurnal umum, yaitu dengan menerapkan fungsi VLOOKUP dan ikon Data Form.

Video Tutorial #6  
Membuat Jurnal Penyesuaian

## 15. Video Tutorial #6 Membuat Jurnal Penyesuaian



Tutorial CV. MEDIA - Microsoft Excel (Trial)

TANGGAL	NO. AKUN	NAMA AKUN	DEBET	KREDIT
31/12/2015	5106	Biaya Penyusutan Peralatan	Rp 300.000,00	
31/12/2015	1202	Akumulasi Penyusutan Peralatan		Rp 300.000,00
31/12/2015	5107	Biaya Penyusutan Kendaraan	Rp 500.000,00	
31/12/2015	1204	Akumulasi Penyusutan Kendaraan		Rp 500.000,00
31/12/2015	5108	Biaya Penyusutan Gedung	Rp 1.000.000,00	
31/12/2015	1206	Akumulasi Penyusutan Gedung		Rp 1.000.000,00
31/12/2015	1104	Iklan Dibayar di Muka	Rp 1.800.000,00	
31/12/2015	5103	Biaya iklan		Rp 1.800.000,00
31/12/2015	5102	Biaya Asuransi	Rp 4.500.000,00	
31/12/2015	1103	Asuransi Dibayar Di Muka		Rp 4.500.000,00
31/12/2015	5105	Biaya Perlengkapan	Rp 1.500.000,00	
31/12/2015	1105	Perlengkapan		Rp 1.500.000,00
31/12/2015	5101	Biaya Gaji	Rp 1.000.000,00	
31/12/2015	2102	Utang Gaji		Rp 1.000.000,00
		JUMLAH	Rp 10.600.000,00	Rp 10.600.000,00

Studi Kasus CV. Media

## 16. Membuat Neraca Lajur

### a. Rumus Kolom Neraca Saldo



# Membuat Neraca Lajur

arahkan pointer pada:  
nama kolom

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debit dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.

RUMUS

Kolom Neraca Saldo didapat dari mengcopy sheet neraca saldo.

Kolom Neraca Saldo

▶

Kolom Penyesuaian

▶

Kolom NSD

▶

Kolom Laba/Rugi

▶

Kolom Neraca

▶

### b. Video Tutorial Kolom Neraca Saldo

◀

## Video Tutorial Spreadsheet #7

## Membuat Neraca Lajur

### Kolom Neraca Saldo

▶

▶

⏮

⏸

00:05

⏭

02:10

⏮

⏭

⏮

⏭

Materi Neraca Lajur

Tutorial CV. MEDIA - Microsoft Excel (Trial)

NO. AKUN	NAMA AKUN	NERACA SALDO		PENYESUAIAN		NSD		LABA/RUGI	
		DEBIT	KREDIT	DEBIT	KREDIT	DEBIT	KREDIT	DEBIT	KREDIT
1101	Kas	Rp 31.900.000,00							
1102	Piutang Usaha	Rp 20.300.000,00							
1103	Asuransi Dibayar Di Muka	Rp 18.000.000,00							
1104	Iklan Dibayar di Muka	Rp -							
1105	Perlengkapan	Rp 5.700.000,00							
1201	Peralatan	Rp 21.300.000,00							
1202	Akumulasi Penyusutan Peralatan		Rp 3.000.000,00						
1203	Kendaraan	Rp 20.000.000,00							
1204	Akumulasi Penyusutan Kendaraan		Rp 10.000.000,00						
1205	Gedung	Rp 75.000.000,00							
1206	Akumulasi Penyusutan Gedung		Rp 25.000.000,00						
1207	Tanah	Rp 30.000.000,00							
2101	Utang Usaha		Rp 29.350.000,00						
2102	Utang Gaji		Rp -						
2201	Utang Bank		Rp 50.000.000,00						
3101	Modal Keenan		Rp 63.450.000,00						
3102	Prive Keenan	Rp 3.300.000,00							
4101	Pendapatan Jasa		Rp 90.700.000,00						
5101	Biaya Gaji	Rp 34.500.000,00							
5102	Biaya Asuransi	Rp -							
5103	Biaya iklan	Rp 2.600.000,00							
5104	Biaya Telepon dan Listrik	Rp 4.900.000,00							
5105	Biaya Perlengkapan	Rp -							

Materi Neraca Lajur

### c. Rumus Kolom Penyesuaian

**Membuat Neraca Lajur**

arahkan pointer pada: nama kolom

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debit dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.

**RUMUS**

Kolom Penyesuaian  
 Penyesuaian Debit =SUMIF(Penyesuaian;No. Akun Neraca Lajur;kolom debit Penyesuaian)  
 Penyesuaian Kredit =SUMIF(Penyesuaian;No. Akun Neraca Lajur;kolom kredit Penyesuaian)

Kolom Neraca Saldo

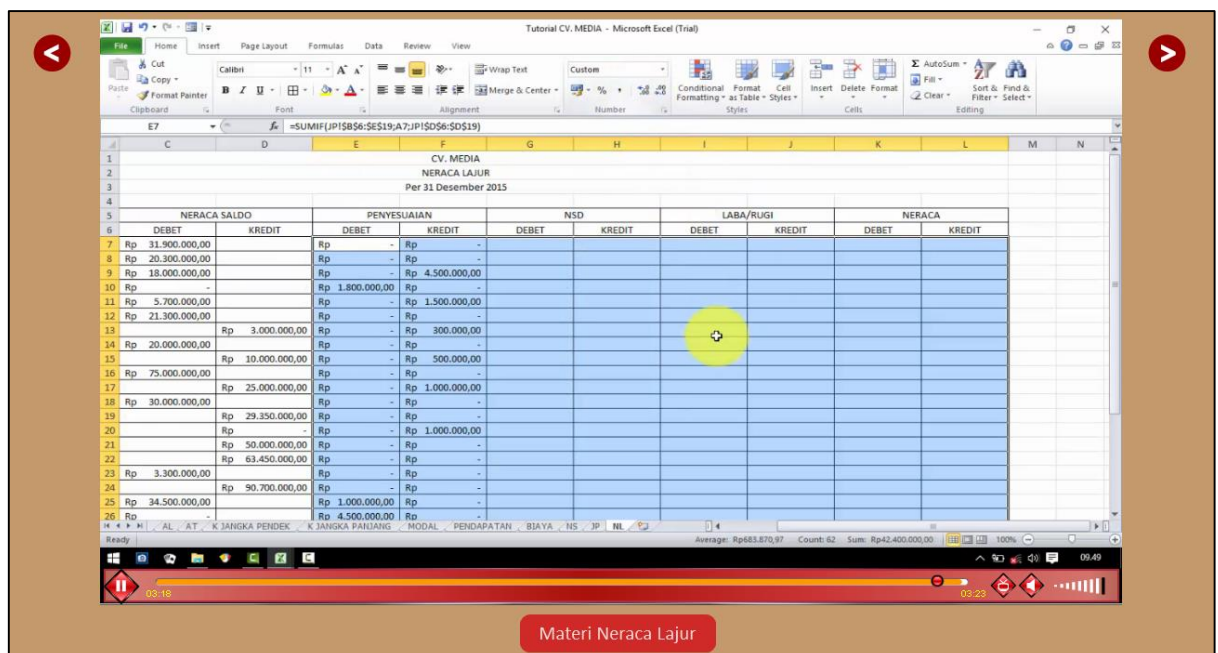
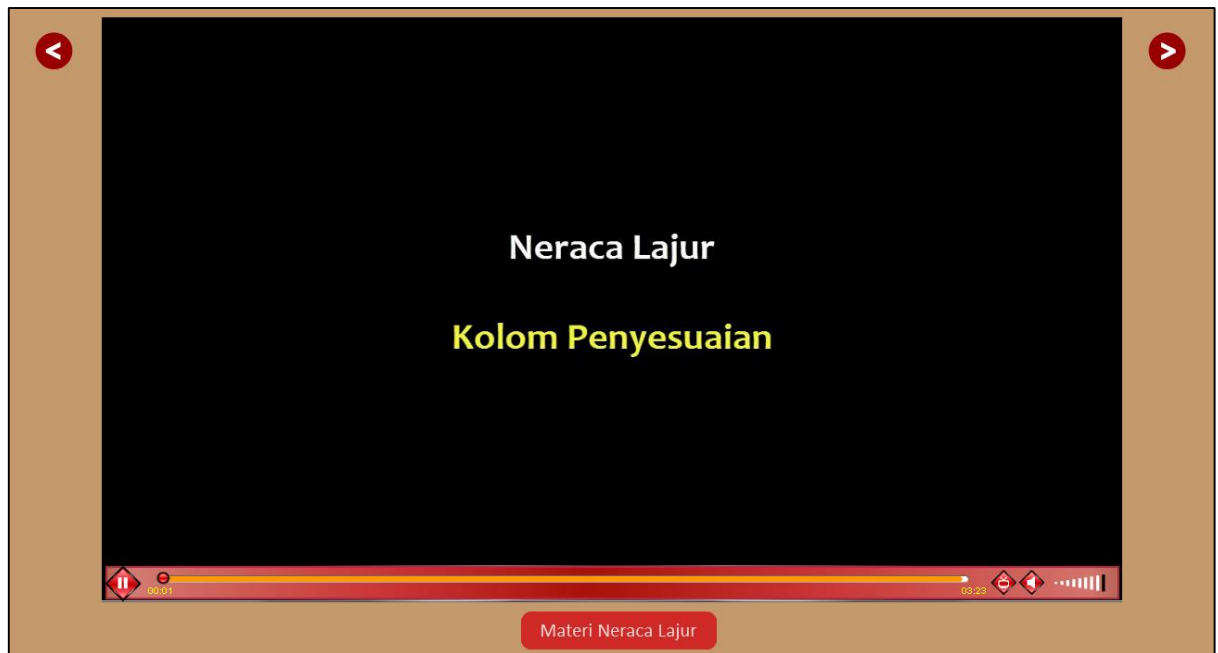
Kolom Penyesuaian

Kolom NSD


Kolom Laba/Rugi

Kolom Neraca

d. Video Tutorial Kolom Penyesuaian



## e. Rumus Kolom NSD



## Membuat Neraca Lajur

arahkan pointer pada:  
nama kolom

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debit dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.

RUMUS

Kolom Neraca Saldo Disesuaikan

NSD Debet =IF(OR(Neraca Saldo Debet+Penyesuaian Debet-Penyesuaian Kredit<0;Neraca Saldo Kredit<>0);0;Neraca Saldo Debet+Penyesuaian Debet-Penyesuaian Kredit)

NSD Kredit =IF(OR(Neraca Saldo Kredit+Penyesuaian Kredit-Penyesuaian Debet<0;Neraca Saldo Debet<>0);0;Neraca Saldo Kredit+Penyesuaian Kredit-Penyesuaian Debet)

Kolom Neraca Saldo
▶

Kolom Penyesuaian
▶

Kolom NSD
▶ KNSD

Kolom Laba/Rugi
▶

Kolom Neraca
▶

## f. Video Tutorial Kolom NSD

◀

## Neraca Lajur

### Kolom NSD

▶



Materi Neraca Lajur

Materi Neraca Lajur

### g. Rumus Kolom Laba/Rugi

arahkan pointer pada: nama kolom

## Membuat Neraca Lajur

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debit dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.

### RUMUS

Kolom Laba/Rugi

Laba/Rugi Debet =IF(No. Akun>=4000;Neraca Saldo Disesuaikan Debet;0)

Laba/Rugi Kredit =IF(No. Akun>=4000;Neraca Saldo Disesuaikan Kredit;0)

Selisih Debet =IF(Kolom kredit>dari kolom debit;kolom kredit-kolom debit;0)

Selisih Kredit =IF(Kolom debit>dari kolom kredit;kolom debit-kolom kredit;0)

Keterangan Laba atau Rugi =IF(Laba/Rugi sebelah kredit>Laba/Rugi sebelah debit;"LABA";"RUGI")

Kolom Neraca Saldo

Kolom Penyesuaian

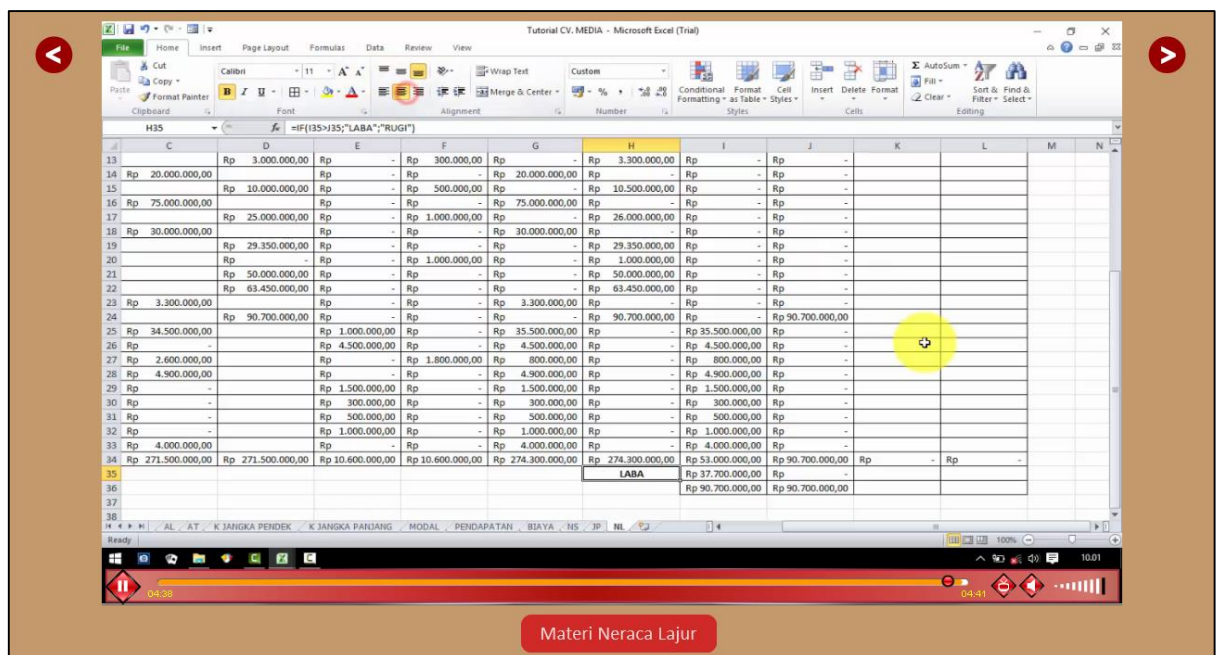
Kolom NSD

Kolom Laba/Rugi

Kolom Neraca



## h. Video Tutorial Kolom Laba/Rugi





## i. Rumus Kolom Neraca



## Membuat Neraca Lajur

arahkan pointer pada:  
nama kolom

- Neraca lajur (kertas kerja) adalah suatu kertas berkolom-kolom (berlajur-lajur) yang dirancang untuk menghimpun semua data akuntansi yang dibutuhkan pada saat perusahaan akan menyusun laporan keuangan dengan cara yang sistematis.
- Terdapat 5 jenis kolom pada neraca lajur, yaitu Neraca Saldo, Penyesuaian, Neraca Saldo Setelah Disesuaikan, Laporan Laba-Rugi, dan Neraca. Masing-masing memiliki kolom debit dan kredit, dalam pengisiannya juga memiliki rumus yang berbeda-beda.

**RUMUS**

**Kolom Neraca**

Neraca Debet = IF(No. Akun < 4000; Neraca Saldo Disesuaikan Debet; 0)

Neraca Kredit = IF(No. Akun < 4000; Neraca Saldo Disesuaikan Kredit; 0)

Selisih Debet = IF(Kolom kredit > dari kolom debit; kolom kredit - kolom debit; 0)

Selisih Kredit = IF(Kolom debit > dari kolom kredit; kolom debit - kolom kredit; 0)

Kolom Neraca Saldo

Kolom Penyesuaian

Kolom NSD

Kolom Laba/Rugi

Kolom Neraca

## j. Video Tutorial Kolom Neraca

<
>

## Neraca Lajur

### Kolom Neraca

00:01
02:49

Studi Kasus CV. Media

Tutorial CV. MEDIA - Microsoft Excel (Trial)

CV. MEDIA  
NERACA LAJUR  
Per 31 Desember 2015

NERACA SALDO		PENYESUAIAN		NSD		LABA/RUGI		NERACA	
DEBIT	KREDIT	DEBIT	KREDIT	DEBIT	KREDIT	DEBIT	KREDIT	DEBIT	KREDIT
Rp 31.900.000,00				Rp 31.900.000,00				Rp 31.900.000,00	
Rp 20.300.000,00				Rp 20.300.000,00				Rp 20.300.000,00	
Rp 18.000.000,00				Rp 13.500.000,00				Rp 13.500.000,00	
		Rp 1.800.000,00		Rp 1.800.000,00				Rp 1.800.000,00	
Rp 5.700.000,00				Rp 4.200.000,00				Rp 4.200.000,00	
Rp 21.300.000,00				Rp 21.300.000,00				Rp 21.300.000,00	
	Rp 3.000.000,00			Rp 3.000.000,00				Rp 3.000.000,00	
Rp 20.000.000,00				Rp 20.000.000,00				Rp 20.000.000,00	
	Rp 10.000.000,00			Rp 500.000,00		Rp 10.500.000,00		Rp 10.500.000,00	
Rp 75.000.000,00				Rp 75.000.000,00				Rp 75.000.000,00	
	Rp 25.000.000,00			Rp 1.000.000,00		Rp 26.000.000,00		Rp 26.000.000,00	
Rp 30.000.000,00				Rp 30.000.000,00				Rp 30.000.000,00	
	Rp 29.350.000,00			Rp 29.350.000,00				Rp 29.350.000,00	
Rp 50.000.000,00				Rp 50.000.000,00				Rp 50.000.000,00	
Rp 63.450.000,00				Rp 63.450.000,00				Rp 63.450.000,00	
Rp 3.300.000,00				Rp 3.300.000,00				Rp 3.300.000,00	
	Rp 90.700.000,00			Rp 90.700.000,00				Rp 90.700.000,00	
Rp 34.500.000,00				Rp 35.500.000,00				Rp 35.500.000,00	
	Rp 4.500.000,00			Rp 4.500.000,00				Rp 4.500.000,00	

Studi Kasus CV. Media

## 17. Membuat Laporan Keuangan

arahkan pointer pada: nama laporan

# Membuat Laporan Keuangan

- Laporan keuangan dapat dibuat dengan membuat formnya terlebih dahulu kemudian mengcopy akun dan saldo yang terdapat di neraca lajur.

Terdapat 3 macam laporan keuangan yang harus dibuat oleh perusahaan.

Laporan Laba/Rugi

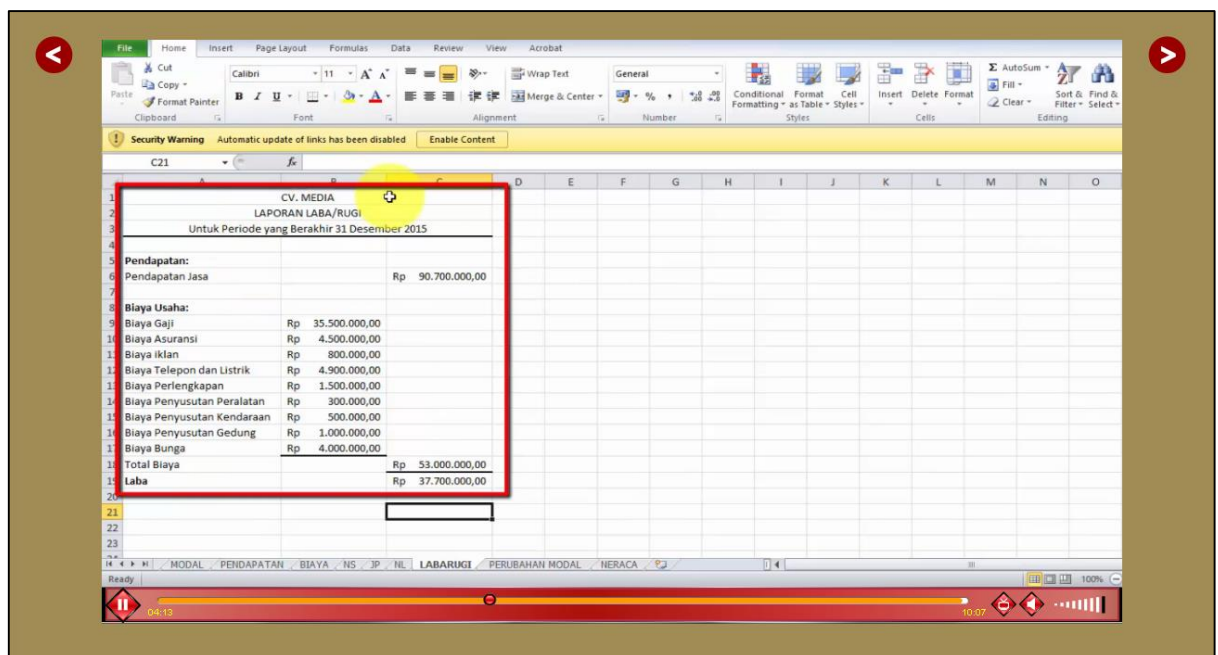
Laporan Perubahan Modal

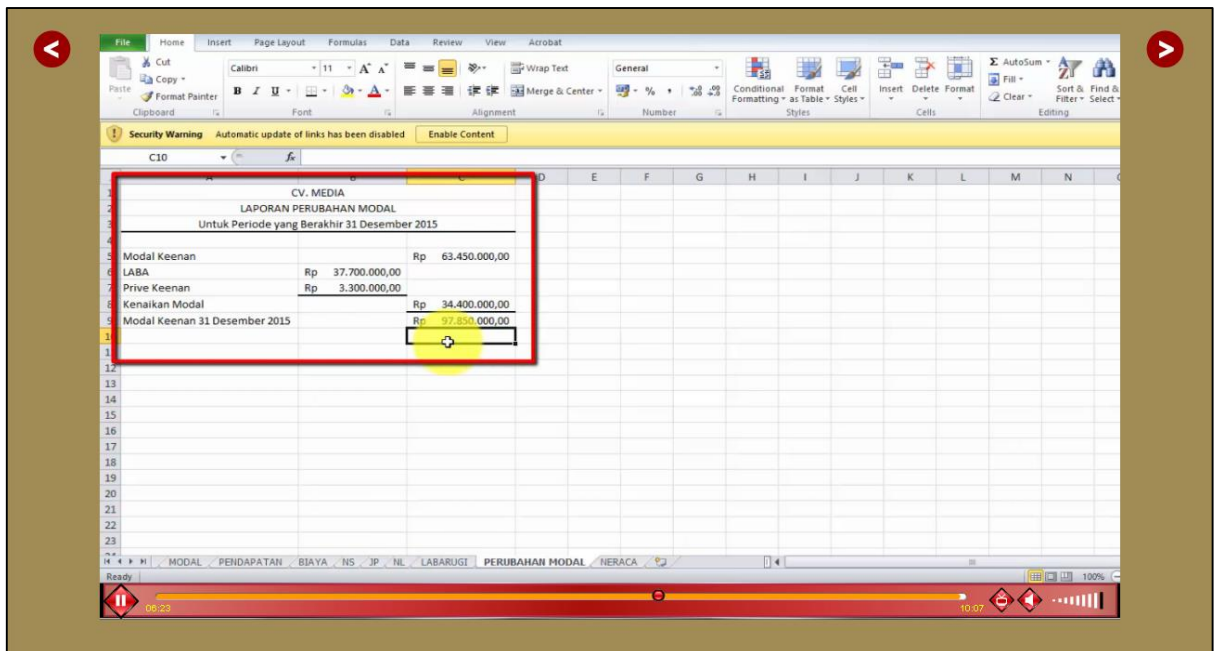
Neraca

Laporan laba/rugi adalah laporan yang menunjukkan pendapatan, beban, dan laba/rugi pada periode tertentu.

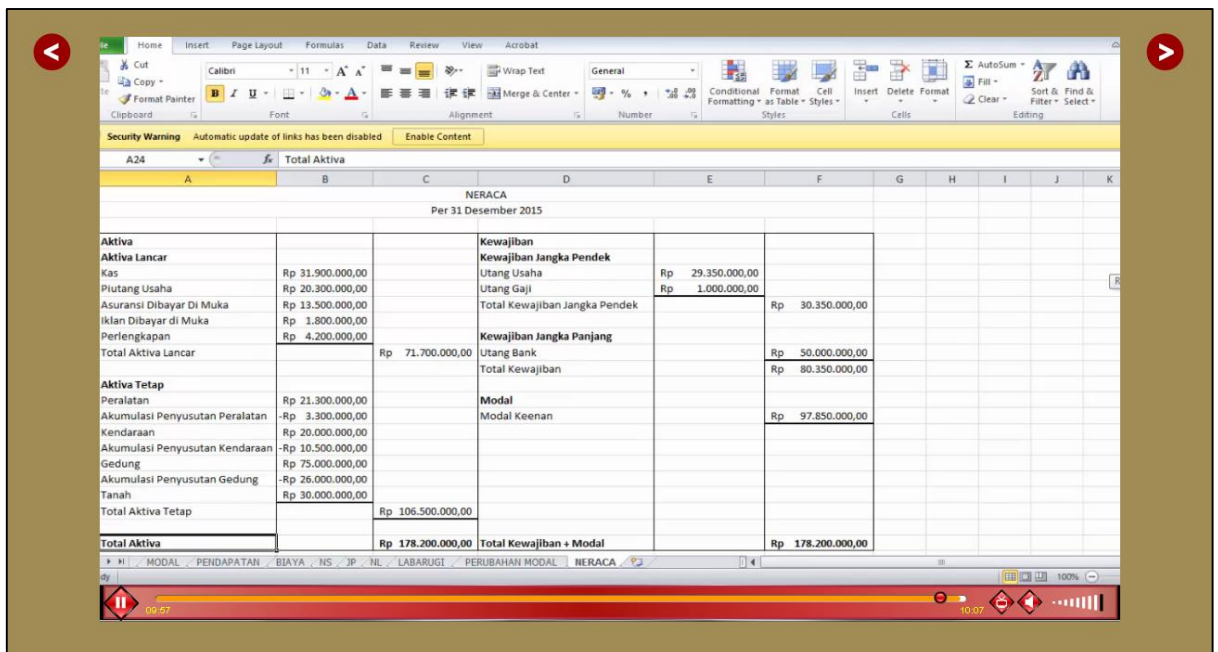
Video Tutorial #8  
Membuat Laporan Keuangan

## 18. Video Tutorial #8 Membuat Laporan



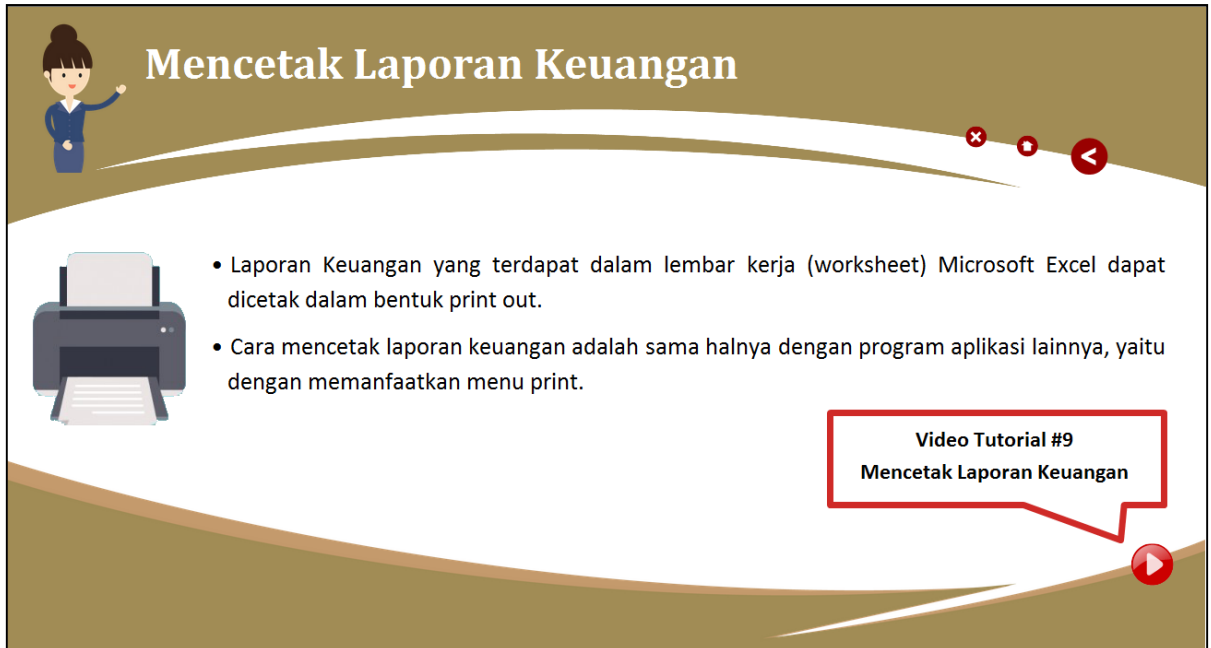


CV. MEDIA		
LAPORAN PERUBAHAN MODAL		
Untuk Periode yang Berakhir 31 Desember 2015		
Modal Keenan		Rp 63.450.000,00
LABA	Rp 37.700.000,00	
Prive Keenan	Rp 3.300.000,00	
Kenaikan Modal		Rp 34.400.000,00
Modal Keenan 31 Desember 2015		Rp 97.850.000,00



NERACA			
Per 31 Desember 2015			
<b>Aktiva</b>			
<b>Aktiva Lancar</b>			
Kas	Rp 31.900.000,00		
Piutang Usaha	Rp 20.300.000,00		
Asuransi Dibayar Di Muka	Rp 13.500.000,00		
Iklan Dibayar di Muka	Rp 1.800.000,00		
Perfengkapan	Rp 4.200.000,00		
Total Aktiva Lancar		Rp 71.700.000,00	
<b>Aktiva Tetap</b>			
Peralatan	Rp 21.300.000,00		
Akumulasi Penyusutan Peralatan	-Rp 3.300.000,00		
Kendaraan	Rp 20.000.000,00		
Akumulasi Penyusutan Kendaraan	-Rp 10.500.000,00		
Gedung	Rp 75.000.000,00		
Akumulasi Penyusutan Gedung	-Rp 26.000.000,00		
Tanah	Rp 30.000.000,00		
Total Aktiva Tetap		Rp 106.500.000,00	
<b>Total Aktiva</b>		<b>Rp 178.200.000,00</b>	
<b>Kewajiban</b>			
<b>Kewajiban Jangka Pendek</b>			
Utang Usaha	Rp 29.350.000,00		
Utang Gaji	Rp 1.000.000,00		
Total Kewajiban Jangka Pendek			Rp 30.350.000,00
<b>Kewajiban Jangka Panjang</b>			
Utang Bank			Rp 50.000.000,00
Total Kewajiban			Rp 80.350.000,00
<b>Modal</b>			
Modal Keenan			Rp 97.850.000,00
<b>Total Kewajiban + Modal</b>			<b>Rp 178.200.000,00</b>

## 19. Mencetak Laporan Keuangan



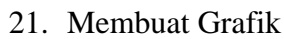
**Mencetak Laporan Keuangan**

- Laporan Keuangan yang terdapat dalam lembar kerja (worksheet) Microsoft Excel dapat dicetak dalam bentuk print out.
- Cara mencetak laporan keuangan adalah sama halnya dengan program aplikasi lainnya, yaitu dengan memanfaatkan menu print.

Video Tutorial #9  
Mencetak Laporan Keuangan

## 20. Video Tutorial #9 Mencetak Laporan Keuangan

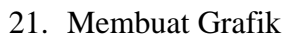




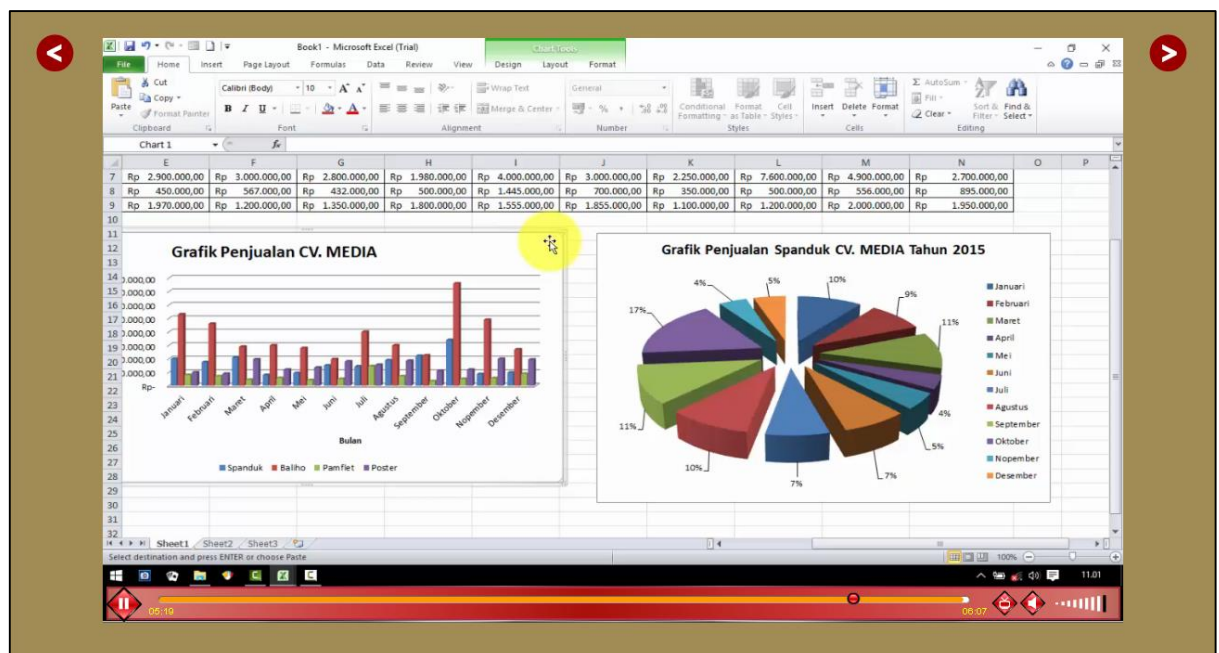
## 21. Membuat Grafik

- ## 21. Membuat Grafik

## 21. Membuat Grafik



## 22. Video Tutorial #10 Membuat Grafik





## 23. Closing




## F. Test Page

## 1. Guidance Page





## 2. Mengurutkan



### Mengurutkan

Urutkanlah langkah-langkah membuat siklus akuntansi perusahaan jasa menggunakan spreadsheet !

- ☐ Membuat neraca saldo
- ☐ Membuat daftar akun
- ☐ Membuat neraca lajur
- ☐ Membuat laporan keuangan
- ☐ Membuat jurnal umum
- ☐ Membuat buku besar
- ☐ Membuat neraca saldo awal
- ☐ Membuat jurnal penyesuaian

Cancel Next ▶

## 3. Benar Salah No. 1 dan 2



### Benar Salah

1. VLOOKUP adalah fungsi pembacaan tabel vertikal yang dapat digunakan untuk membuat jurnal umum.

☐ Benar

☐ Salah


2. Cara mengisi data transaksi di Buku Besar adalah dengan menggunakan Data Advanced.

☐ Benar

☐ Salah

Cancel ◀ Back Next ▶

## 4. Benar Salah No. 3 dan 4



## Benar Salah

3. Data Short adalah fasilitas yang digunakan untuk memasukkan semua transaksi ke dalam jurnal umum.

☐ Benar

☐ Salah

4. Fungsi yang digunakan untuk memunculkan nama akun di Buku Besar adalah HLOOKUP.

☐ Benar

☐ Salah

Cancel ◀ Back Next ▶

## 5. Benar Salah No. 5 dan 6



## Benar Salah

5. Tombol yang digunakan untuk menambah record baru dalam Jurnal Umum adalah New.

☐ Benar

☐ Salah


6. Terdapat 5 kolom dalam neraca lajur, yaitu kolom Neraca Saldo, Penyesuaian, NSD, Laba/Rugi, dan Neraca.

☐ Benar

☐ Salah

Cancel ◀ Back Next ▶

## 6. Benar Salah No. 7 dan 8



## Benar Salah

7. Chart Layout digunakan untuk mengubah tipe grafik.

☐ Benar

☐ Salah

8. Perintah untuk melihat format cetak terlebih dahulu sebelum dicetak ke printer adalah Print Setup.

☐ Benar

☐ Salah

Cancel ◀ Back Next ▶

## 7. Benar Salah No. 9 dan 10



## Benar Salah

9. Untuk membuat Neraca Saldo, data keuangannya diambil dari Jurnal Umum.

☐ Benar

☐ Salah

10. Tombol pada keyboard yang berfungsi untuk mengabsolutkan sel adalah F4.

☐ Benar

☐ Salah

Cancel ◀ Back Next ▶

## 8. Pilihan Ganda No. 1



**Pilihan Ganda**

1. Rumus yang digunakan untuk memasukkan data pada kolom Neraca Saldo Disesuaikan (NSD) debit adalah...

- ☐ a. =SUMIF(or(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)
- ☐ b. =IF(or(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)
- ☐ c. =IF(or(and(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)
- ☐ d. =SUMIF(and(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)
- ☐ e. =IF(and(neraca saldo debit+penyesuaian debit-penyesuaian kredit<0;neraca saldo kredit<>0);0;neraca saldo debit+penyesuaian debit-penyesuaian kredit)

Cancel   ◀ Back   Next ▶

## 9. Pilihan Ganda No. 2



**Pilihan Ganda**

2. Ikon yang digunakan untuk menambah sheet baru adalah...

- ☐ a. Insert Column
- ☐ b. New Worksheet
- ☐ c. New Column
- ☐ d. Insert Sheet
- ☐ e. Insert Worksheet

Cancel   ◀ Back   Next ▶

## 10. Pilihan Ganda No. 3



## Pilihan Ganda

3. Rumus yang digunakan untuk memasukkan data pada lajur Penyesuaian Debet adalah...

- ☐ a. =SUM(penyesuaian;no. akun neraca lajur; kolom debet penyesuaian)
- ☐ b. =AVERAGE(penyesuaian;no. akun neraca lajur; kolom debet penyesuaian)
- ☐ c. =SUMIF(penyesuaian;no. akun neraca lajur; kolom debet penyesuaian)
- ☐ d. =MIN(penyesuaian;no. akun neraca lajur; kolom debet penyesuaian)
- ☐ e. =IF(penyesuaian;no. akun neraca lajur; kolom debet penyesuaian)

Cancel ◀ Back Next ▶

## 11. Pilihan Ganda No. 4



## Pilihan Ganda

4. Salah satu langkah membuat buku besar adalah menggunakan Data Advanced, pada kotak dialog Advanced Filter terdapat keterangan Action yang harus diisi dengan ....

- ☐ a. List Range
- ☐ b. Filter the list, in-place
- ☐ c. Criteria Range
- ☐ d. Copy to another location
- ☐ e. Unique records only

Cancel ◀ Back Next ▶

## 12. Pilihan Ganda No. 5



The screenshot shows a digital quiz interface with a brown header and footer. In the top left, there is an illustration of a person with red hair and glasses sitting at a desk with a laptop. The title 'Pilihan Ganda' is centered in the header. On the right side of the header, there are two small red icons: a cross and a plus sign. The main content area is white and contains the following text:

5. Tanda sama dengan (=) di spreadsheet disebut dengan istilah...

- ☐ a. Pembagian
- ☐ b. Asteris
- ☐ c. Formula
- ☐ d. Penjumlahan
- ☐ e. Pengurangan

At the bottom right, there are three buttons: 'Cancel', '◀ Back', and 'Next ▶'.

## 13. Pilihan Ganda No. 6



The screenshot shows a digital quiz interface with a brown header and footer. In the top left, there is an illustration of a person with red hair and glasses sitting at a desk with a laptop. The title 'Pilihan Ganda' is centered in the header. On the right side of the header, there are two small red icons: a cross and a plus sign. The main content area is white and contains the following text:

6. Berikut ini pengelompokan akun yang digunakan sebagai dasar pembuatan sheet buku besar, kecuali...

- ☐ a. Kas
- ☐ b. Utang
- ☐ c. Modal
- ☐ d. Beban
- ☐ e. Pendapatan

At the bottom right, there are three buttons: 'Cancel', '◀ Back', and 'Next ▶'.

## 14. Pilihan Ganda No. 7



The screenshot shows a software interface for a multiple-choice question. At the top left, there is a cartoon character of a man with glasses sitting at a desk with a laptop. To the right of the character, the title "Pilihan Ganda" is displayed in a large, bold, black font. Below the title, the question text reads: "7. Langkah yang dapat dilakukan untuk memberi nama/judul grafik adalah...". There are five radio button options listed below the question: "a. Klik kiri Chart Title", "b. Klik kanan Edit Title", "c. Klik kanan Chart Title", "d. Klik kiri Edit Title", and "e. Klik Move Chart". In the top right corner, there are two small red circular icons: one with a white 'X' and one with a white plus sign. At the bottom right, there are three buttons: "Cancel", "◀ Back", and "Next ▶". The background of the interface is a light blue gradient with a white wavy line separating the header from the question area.

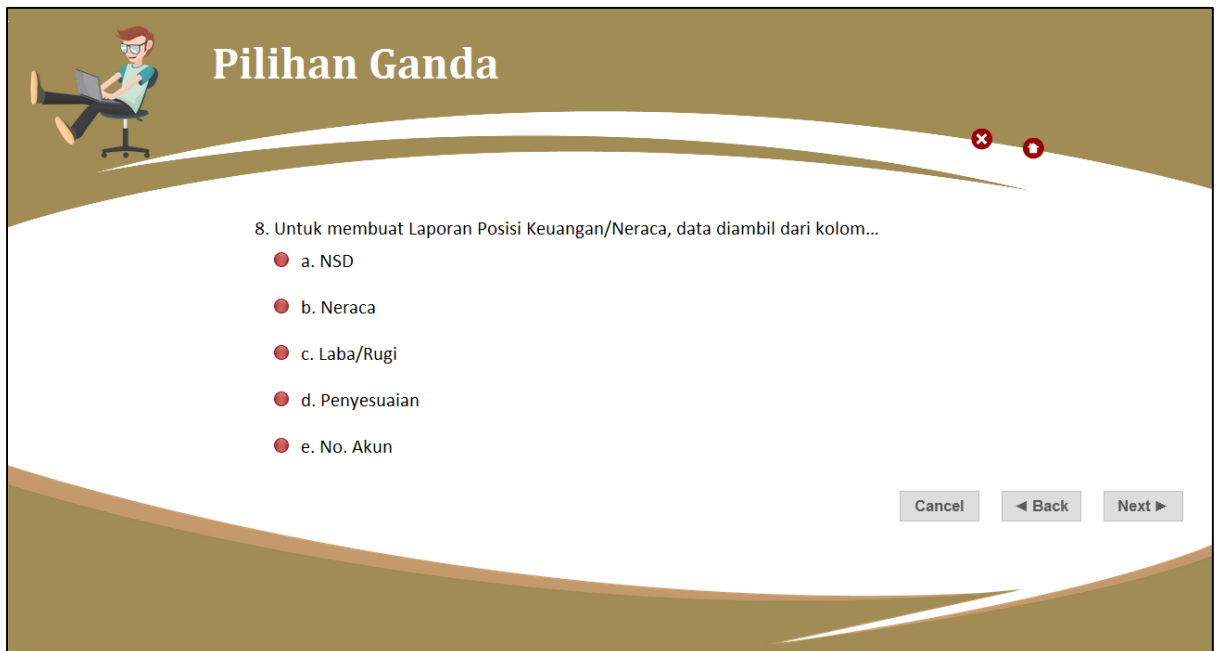
**Pilihan Ganda**

7. Langkah yang dapat dilakukan untuk memberi nama/judul grafik adalah...

- ☐ a. Klik kiri Chart Title
- ☐ b. Klik kanan Edit Title
- ☐ c. Klik kanan Chart Title
- ☐ d. Klik kiri Edit Title
- ☐ e. Klik Move Chart

Cancel ◀ Back Next ▶

## 15. Pilihan Ganda No. 8



The screenshot shows a software interface for a multiple-choice question. At the top left, there is a cartoon character of a man with glasses sitting at a desk with a laptop. To the right of the character, the title "Pilihan Ganda" is displayed in a large, bold, black font. Below the title, the question text reads: "8. Untuk membuat Laporan Posisi Keuangan/Neraca, data diambil dari kolom...". There are five radio button options listed below the question: "a. NSD", "b. Neraca", "c. Laba/Rugi", "d. Penyesuaian", and "e. No. Akun". In the top right corner, there are two small red circular icons: one with a white 'X' and one with a white plus sign. At the bottom right, there are three buttons: "Cancel", "◀ Back", and "Next ▶". The background of the interface is a light blue gradient with a white wavy line separating the header from the question area.

**Pilihan Ganda**

8. Untuk membuat Laporan Posisi Keuangan/Neraca, data diambil dari kolom...

- ☐ a. NSD
- ☐ b. Neraca
- ☐ c. Laba/Rugi
- ☐ d. Penyesuaian
- ☐ e. No. Akun

Cancel ◀ Back Next ▶

## 16. Pilihan Ganda No. 9




## Pilihan Ganda

9. Rumus yang digunakan untuk memasukkan data pada lajur Penyesuaian Kredit adalah...

- ☐ a. =MIN(penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian)
- ☐ b. =SUM(penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian)
- ☐ c. =IF(penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian)
- ☐ d. =AVERAGE(penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian)
- ☐ e. =SUMIF(penyesuaian;no. akun neraca lajur; kolom kredit penyesuaian)

Cancel   ◀ Back   Next ▶

## 17. Pilihan Ganda No. 10



## Pilihan Ganda

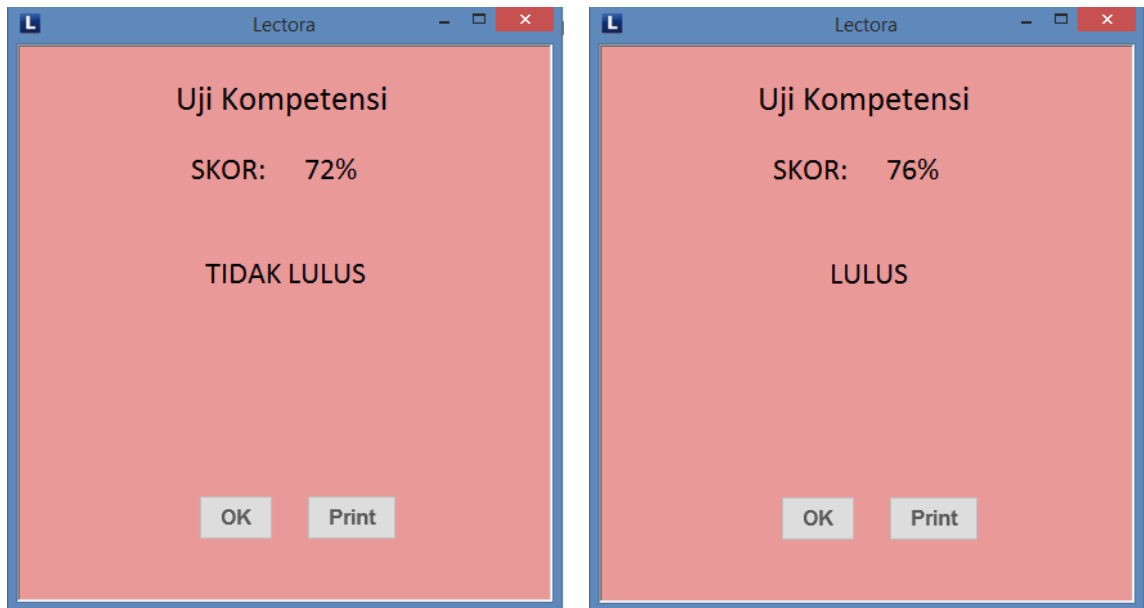
10. Perintah untuk menyalin nilai sekaligus format data adalah...

- ☐ a. Validations
- ☐ b. Values and number format
- ☐ c. All except borders
- ☐ d. Bullet and numbering
- ☐ e. Formulas and number format

Result



## 18. Test Result



## 19. Passed Page



## 20. Failed Page



## MODUL PEMBELAJARAN INTERAKTIF


**Hasil Uji Kompetensi**  
Kamu BELUM LULUS mengerjakan uji kompetensi ini.  
Tetap Semangat !



Pelajari kembali materi pembelajaran dalam modul ini.  
Lalu kerjakan uji kompetensi dan soal latihan studi kasus CV. EXPRESS untuk menambah pengetahuanmu !

Uji Kompetensi
Latihan Studi Kasus CV. EXPRESS

## 21. Case Study



## Studi Kasus CV. EXPRESS

Kerjakan soal studi kasus berikut ini di komputer masing-masing untuk menguji kemampuanmu !

CV. EXPRESS adalah perusahaan jasa yang dimiliki oleh Tuan Putra. CV. EXPRESS bergerak di bidang pengiriman barang. Anda sebagai akuntan CV. EXPRESS bertugas untuk mengerjakan pembukuan dengan menggunakan Microsoft Excel 2010 sebagai program pengolah angka/spreadsheet. Berikut ini adalah neraca saldo CV. EXPRESS pada tanggal 30 November 2015:

CV. EXPRESS				
NERACA SALDO				
Periode 30 November 2015				
No. Akun	Nama Akun	Saldo		
		Debet	Kredit	
100	Aktiva			
110	Aktiva Lancar			
111	Kas	Rp 30.000.000,00		
112	Kas Kecil	Rp 500.000,00		
113	Piutang Usaha	Rp 2.000.000,00		

## 22. Answer Key

**Kunci Jawaban**

**Petunjuk**

**Kompetensi**

**Materi**

**Uji Kompetensi**

**Pustaka**

**Profil**

**CV. EXPRESS**  
LAPORAN LABA/RUGI  
Untuk Periode yang berakhir 31 Desember 2015

Pendapatan		
Pendapatan Jasa		Rp 35,940,000.00
<b>Beban</b>		
Beban Gaji	Rp 3,100,000.00	
Beban Pemeliharaan	Rp 400,000.00	
Beban Asuransi	Rp 320,000.00	
Beban Penyusutan Peralatan	Rp 150,000.00	
Beban Penyusutan Gedung	Rp 1,700,000.00	
Beban Perlengkapan	Rp 1,700,000.00	
Beban Sewa	Rp 200,000.00	
Beban Iklan	Rp 600,000.00	
Beban Utilitas	Rp 1,400,000.00	
Beban Kebersihan	Rp 120,000.00	
Beban Lain-lain	Rp 150,000.00	
<b>Total Beban</b>	<b>Rp 9,840,000.00</b>	
<b>Laba</b>		<b>Rp 26,100,000.00</b>

**CV. EXPRESS**  
LAPORAN PERUBAHAN MODAL  
Untuk Periode yang berakhir 31 Desember 2015

Modal Putra		
LABA	Rp 26,100,000.00	Rp 45,380,000.00
Prive Putra	Rp 200,000.00	
Kenaikan modal		Rp 25,900,000.00
<b>Modal Keenan 31 Desember 2015</b>		<b>Rp 71,280,000.00</b>

**CV. EXPRESS**  
NERACA  
Per 31 Desember 2015

Aktiva			Kewajiban		
<b>Aktiva Lancar</b>			<b>Kewajiban Jangka Pendek</b>		
Kas	Rp 72,120,000		Utang Usaha	Rp 9,100,000	
Kas Kecil	Rp 350,000		Utang Gaji	Rp -	
Piutang Usaha	Rp 3,100,000		<b>Total Kewajiban Jangka Pendek</b>	<b>Rp 9,100,000</b>	
Iklan Dibayar di Muka	Rp 600,000		<b>Kewajiban Jangka Panjang</b>		
Sewa Dibayar di Muka	Rp 200,000		Utang Bank	Rp 30,000,000	
Perlengkapan	Rp 2,000,000		<b>Total Kewajiban</b>	<b>Rp 39,100,000</b>	
<b>Total Aktiva Lancar</b>	<b>Rp 78,370,000</b>		<b>Modal</b>		
<b>Aktiva Tetap</b>			Modal Keenan	Rp 71,280,000	
Peralatan	Rp 1,500,000				
Akumulasi Penyusutan Peralatan	Rp (390,000)				
Gedung	Rp 34,000,000				
Akumulasi Penyusutan Gedung	Rp (3,100,000)				
<b>Total Aktiva Tetap</b>	<b>Rp 32,010,000</b>				
<b>Total Aktiva</b>	<b>Rp 110,380,000</b>		<b>Total Kewajiban dan Modal</b>	<b>Rp 110,380,000</b>	

Kunci jawaban uji kompetensi selengkapnya dapat kalian lihat melalui link atau alamat URL berikut ini: [goo.gl/IrN3Pi](http://goo.gl/IrN3Pi)

## G. Reference Page

**PUSTAKA**

**Petunjuk**

**Kompetensi**

**Materi**

**Uji Kompetensi**

**Pustaka**

**Profil**

- Al Haryono Jusup. 2011. *Dasar-Dasar Akuntansi Jilid 1*. Yogyakarta: Bagian Penerbitan STIE YKPN.
- Angga Bahriyanata Perdana. 2015. *Aplikasi Komputer Akuntansi Spreadsheet/Pengolah Angka Excel 2007*. Yogyakarta: AB Publisher.
- Deky Noviar, Bimo Suciono. 2013. *Modul Mengoperasikan Paket Program Pengolah Angka/Spreadsheet untuk SMK dan MAK*. Jakarta: Erlangga.
- Muttakin Khoiruddin dan Darsono. 2012. *Penggunaan Aplikasi Spreadsheet dalam Akuntansi untuk SMK Kompetensi Keahlian Akuntansi*. Bantung: Armico.
- Sumber Gambar : [www.freeipk.com](http://www.freeipk.com)

## H. Profile Page

 **PROFIL**

**Petunjuk**  
**Kompetensi**  
**Materi**  
**Uji Kompetensi**  
**Pustaka**  
**Profil**

**Modul Pembelajaran Interaktif**

Disusun oleh:  
Nama : Rini Purnawati  
NIM : 13803241071  
Program Studi : Pendidikan Akuntansi  
Almamater : Universitas Negeri Yogyakarta  
Software : Lectora Inspire 12

Dosen Pembimbing : Prof. Sukirno, Ph.D.  
NIP : 19690414 199403 1 002  
Jurusan : Pendidikan Akuntansi

## **APPENDIX 2**

- a. Instrument of Validation Questionnaire for Material Expert
- b. Instrument of Validation Questionnaire for Media Expert
- c. Instrument of Validation Questionnaire for Accounting Teacher
- d. Instrument of Students' Response Questionnaire for Field Try Out
- e. Instrument of Learning Motivation Before Try Out
- f. Try Out Result of Learning Motivation Questionnaire
- g. Instrument of Learning Motivation After Try Out

**APPENDIX 2.a. Instrument of Validation Questionnaire for Material Expert**
**ANGKET VALIDASI AHLI MATERI**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Ahli Materi : Rizqi Ilyasa Aghni, M.Pd.

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku ahli materi terhadap kelayakan modul pembelajaran interaktif pada Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.

### A. Penilaian Materi

No	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1	Kesesuaian materi dengan Kompetensi Dasar					
2	Kesesuaian materi dengan indikator					
3	Kebenaran konsep					
4	Kelengkapan materi yang dibahas dalam modul					
5	Keakuratan materi yang disajikan dalam modul					
6	Konsep dan definisi yang disajikan tidak menimbulkan banyak tafsir					
7	Kejelasan materi yang disajikan					
8	Keruntutan (sistematika) materi dalam modul					
9	Kejelasan alur logika materi yang disajikan					
10	Kejelasan pembahasan contoh-contoh dalam modul					
11	Kejelasan soal yang disajikan					
12	Kelengkapan soal yang disajikan					
13	Keakuratan soal yang disajikan					
14	Kesesuaian jumlah soal dalam mengukur kompetensi materi yang disajikan					
15	Keragaman soal					
16	Kesesuaian kunci jawaban dengan soal					
17	Kesesuaian penilaian (umpan balik) dengan hasil uji kompetensi siswa					
18	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi					
19	Ejaan dan tanda baca yang digunakan berdasarkan EYD					
20	Aspek bahasa dalam penyajian materi					
21	Rumusan tujuan pembelajaran operasional					
22	Kejelasan petunjuk belajar					
23	Terdapat muatan aspek kognitif					
24	Terdapat muatan aspek afektif					
25	Terdapat muatan aspek psikomotorik					

26	Pemberian latihan (studi kasus) untuk pemahaman konsep					
----	--	--	--	--	--	--

### B. Kebenaran Materi

No	Jenis Kesalahan	Saran Perbaikan

### C. Komentar/Saran

.....  
 .....

### D. Kesimpulan

Lingkari nomor sesuai dengan kesimpulan:

1. Layak untuk diujicobakan
2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, .....

Ahli Materi,

Rizqi Ilyasa Aghni, M.Pd.

NIP 19880302 201504 1 002



**APPENDIX 2.b. Instrument of Validation Questionnaire for Media Expert**
**ANGKET VALIDASI AHLI MEDIA**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Ahli Media : Estu Miyarso, M.Pd.

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku ahli media terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.

### A. Penilaian Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Ukuran file modul pembelajaran interaktif tidak terlalu besar					
2.	Modul pembelajaran interaktif tidak berjalan lambat					
3.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian					
4.	Pengoperasian modul pembelajaran interaktif ini sederhana					
5.	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>hardware</i>					
6.	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>software</i>					
7.	Proses instalasi media dilakukan dengan mudah					
8.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas					
9.	Media mendukung materi yang disajikan (komunikatif)					
10.	Kreatif dalam menuangkan ide gagasan					
11.	Media dibuat inovatif dan menarik					
12.	Penggunaan <i>background</i> sesuai dan tidak mengganggu					
13.	Penggunaan efek transisi yang menarik					
14.	Tampilan yang digunakan menarik					
15.	Tulisan dapat dibaca dengan baik					
16.	Pemilihan dan komposisi warna yang sesuai					
17.	Proporsi gambar sesuai dengan desain atau tampilan					
18.	Pengaturan tata letak yang sesuai					
19.	Pemilihan jenis huruf					
20.	Navigasi dalam modul mudah digunakan					
21.	Navigasi berfungsi dengan baik					
22.	Video yang disajikan memperjelas materi					

**B. Kebenaran Media**

No	Jenis Kesalahan	Saran Perbaikan

**C. Komentar/Saran**

.....

.....

**D. Kesimpulan**

Lingkari nomor sesuai dengan kesimpulan:

1. Layak untuk diujicobakan
2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, .....

Ahli Media,

Estu Miyarso, M.Pd.

NIP 19770203 200501 1 002

**APPENDIX 2.c. Instrument of Validation Questionnaire for Accounting Teacher**
**ANGKET VALIDASI GURU AKUNTANSI**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Guru Akuntansi : Marsono, S.Pd.

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku guru akuntansi terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.

### A. Penilaian Materi dan Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Kesesuaian materi dengan Kompetensi Dasar					
2.	Kesesuaian materi dengan indikator					
3.	Kelengkapan materi yang dibahas dalam modul					
4.	Keakuratan materi yang disajikan dalam modul					
5.	Kejelasan materi yang disajikan					
6.	Keruntutan (sistematika) materi dalam modul					
7.	Kejelasan pembahasan contoh-contoh dalam modul.					
8.	Kejelasan soal yang disajikan					
9.	Kelengkapan soal yang disajikan					
10.	Kesesuaian kunci jawaban dengan soal					
11.	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi					
12.	Ejaan dan tanda baca yang digunakan berdasarkan EYD					
13.	Rumusan tujuan pembelajaran operasional					
14.	Kejelasan petunjuk belajar					
15.	Terdapat muatan aspek kognitif					
16.	Terdapat muatan aspek afektif					
17.	Terdapat muatan aspek psikomotorik					
18.	Pemberian latihan (studi kasus) untuk pemahaman konsep					
19.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian					
20.	Proses instalasi media dilakukan dengan mudah					
21.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas					
22.	Kreatif dalam menuangkan ide gagasan					
23.	Penggunaan <i>background</i> sesuai dan tidak mengganggu					

24.	Tampilan yang digunakan menarik					
25.	Pemilihan dan komposisi warna yang sesuai					
26.	Pengaturan tata letak yang sesuai					
27.	Navigasi dalam modul mudah digunakan					
28.	Video yang disajikan memperjelas materi					

### B. Kebenaran Materi dan Media

No	Jenis Kesalahan	Saran Perbaikan

### C. Komentarisaran

.....  
 .....

### D. Kesimpulan

Lingkari nomor sesuai dengan kesimpulan:

1. Layak untuk diujicobakan
2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, .....  
 Guru Akuntansi,

Marsono, S.Pd.  
 NIP 197108272008011004

**APPENDIX 2.d. Instrument of Students' Response Questionnaire**
**ANGKET RESPON SISWA**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Saudara selaku siswa terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Saudara akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Saudara dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Saudara mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Saudara untuk mengisi angket ini saya ucapkan terima kasih.

### A. Penilaian Materi dan Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Kejelasan materi yang disajikan					
2.	Keruntutan (sistematika) materi dalam modul					
3.	Kejelasan pembahasan contoh-contoh dalam modul					
4.	Kejelasan soal yang disajikan					
5.	Bahasa yang digunakan mudah untuk dipahami					
6.	Materi yang disajikan dapat menimbulkan komunikasi interaktif					
7.	Materi yang disajikan dalam bentuk modul interaktif dapat memotivasi siswa untuk belajar					
8.	Materi yang disajikan membantu pemahaman siswa					
9.	Materi yang disajikan dalam bentuk modul dapat mendorong siswa belajar secara mandiri					
10.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian					
11.	Proses instalasi media dilakukan dengan mudah					
12.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas					
13.	Penggunaan <i>background</i> tidak mengganggu					
14.	Tampilan yang digunakan menarik					
15.	Pemilihan dan komposisi warna yang sesuai					
16.	Pengaturan tata letak yang sesuai					
17.	Navigasi dalam modul mudah digunakan					
18.	Video yang disajikan memperjelas materi					



**B. Komentar/Saran**

.....

.....

.....

.....

.....

.....

.....

Yogyakarta, .....

Nama Siswa

.....

<b>APPENDIX 2.e. Instrument of Learning Motivation Before Try Out</b>
---

### ANGKET MOTIVASI BELAJAR SISWA

**Petunjuk**

1. Tulislah identitas Anda dengan benar.
2. Perhatikan dengan seksama setiap pernyataan yang ada.
3. Jawablah sesuai dengan kondisi Anda sebenarnya.
4. Berilah tanda cek (✓) untuk setiap pernyataan pada kolom alternatif jawaban.
5. Angket ini digunakan untuk mengetahui motivasi belajar siswa dan tidak akan mempengaruhi nilai pada mata pelajaran yang bersangkutan.
6. Kerahasiaan identitas dan pengisian angket ini terjaga.

**Keterangan**

- SS = Sangat Setuju  
 S = Setuju  
 KS = Kurang Setuju  
 TS = Tidak Setuju  
 STS = Sangat Tidak Setuju

**Identitas Responden**

Nama : .....  
 Kelas : .....  
 No. Absen : .....

No.	Pernyataan	SS	S	KS	TS	STS
1.	Saya tidak berhenti mengerjakan soal-soal <i>spreadsheet</i> jika belum selesai.					
2.	Saya menunda-nunda mengerjakan pekerjaan rumah yang diberikan oleh guru.					
3.	Saya bertanya kepada guru ketika ada materi yang belum saya pahami.					
4.	Saya senang mendapatkan tugas-tugas dari guru untuk menambah pengetahuan saya.					
5.	Saya mencontek agar mendapat nilai yang baik.					
6.	Saya mempelajari kembali materi yang sudah diberikan guru diluar jam pelajaran.					
7.	Saya belajar jika hanya ada pekerjaan rumah dan ulangan.					
8.	Saya ingin menguasai materi-materi <i>spreadsheet</i> baik secara teori maupun praktik.					

9.	Saya memperhatikan dan mencatat poin-poin penting setiap penjelasan yang diberikan oleh guru.					
10.	Sebelum pelajaran dimulai saya sudah belajar terlebih dahulu materi yang akan disampaikan hari itu.					
11.	Saya memiliki target untuk mendapatkan nilai diatas KKM.					
12.	Saya ragu akan mendapatkan nilai yang memuaskan dengan kemampuan yang saya miliki.					
13.	Saya yakin akan menguasai materi <i>spreadsheet</i> .					
14.	Saya belajar dengan giat untuk dapat memahami materi <i>spreadsheet</i> .					
15.	Saya merasa senang jika orang lain menghargai usaha belajar saya.					
16.	Saya terkadang berbicara dengan teman diluar materi pembelajaran saat guru sedang menjelaskan materi.					
17.	Saya senang diperhatikan oleh guru ketika proses pembelajaran.					
18.	Pemberian motivasi dari guru penting agar saya lebih semangat belajar.					
19.	Saya senang membaca buku dan bersemangat mengerjakan soal latihan praktik <i>spreadsheet</i> .					
20.	Di kelas, saya mengantuk atau pikiran saya tidak fokus karena pelajaran yang membosankan.					
21.	Media pembelajaran yang digunakan guru menarik dan membuat saya bersemangat.					
22.	Saya bersemangat mengikuti pelajaran ketika guru menggunakan metode yang bervariasi.					
23.	Saya senang belajar dengan kelompok belajar atau beberapa teman saya.					
24.	Saya sudah nyaman dengan lingkungan belajar saya sekarang.					
25.	Saya senang jika mata pelajaran kosong (guru tidak hadir).					
26.	Saya senang dengan pelajaran tambahan (les).					

## APPENDIX 2.f. Try Out Result of Learning Motivation Questionnaire

### Data Processing Result

#### Correlations

			item1	item2	item3	item4	item5	item6	item7	item8	item9	item10	item11	item12	item13
Spearman's rho	skor_total	Correlation Coefficient	,466**	,628**	,511**	,514**	,413*	,285	,194	,233	,464**	,049	,122	,434*	,394*
		Sig. (2-tailed)	,010	,000	,004	,004	,023	,126	,305	,216	,010	,799	,520	,017	,031
		N	30	30	30	30	30	30	30	30	30	30	30	30	30

			item14	item15	item16	item17	item18	item19	item20	item21	item22	item23	item24	item25	item26
Spearman's rho	skor_total	Correlation Coefficient	,468**	,178	,528**	,642**	,259	,035	,540**	,516**	,323	,235	,401*	,608**	,425*
		Sig. (2-tailed)	,009	,348	,003	,000	,167	,856	,002	,004	,081	,211	,028	,000	,019
		N	30	30	30	30	30	30	30	30	30	30	30	30	30

\* = Invalid Item

#### Reliability Statistics

Cronbach's Alpha	N of Items
,833	16

<b>APPENDIX 2.g. Instrument of Learning Motivation After Try Out</b>
--

### ANGKET MOTIVASI BELAJAR SISWA

**Petunjuk**

1. Tulislah identitas Anda dengan benar.
2. Perhatikan dengan seksama setiap pernyataan yang ada.
3. Jawablah sesuai dengan kondisi Anda sebenarnya.
4. Berilah tanda cek (✓) untuk setiap pernyataan pada kolom alternatif jawaban.
5. Angket ini digunakan untuk mengetahui motivasi belajar siswa dan tidak akan mempengaruhi nilai pada mata pelajaran yang bersangkutan.
6. Kerahasiaan identitas dan pengisian angket ini terjaga.

**Keterangan**

- SS = Sangat Setuju  
 S = Setuju  
 KS = Kurang Setuju  
 TS = Tidak Setuju  
 STS = Sangat Tidak Setuju

**Identitas Responden**

Nama : .....  
 Kelas : .....  
 No. Absen : .....

No.	Pernyataan	SS	S	KS	TS	STS
1.	Saya tidak berhenti mengerjakan soal-soal <i>spreadsheet</i> jika belum selesai.					
2.	Saya menunda-nunda mengerjakan pekerjaan rumah yang diberikan oleh guru.					
3.	Saya bertanya kepada guru ketika ada materi yang belum saya pahami.					
4.	Saya senang mendapatkan tugas-tugas dari guru untuk menambah pengetahuan saya.					
5.	Saya mencontek agar mendapat nilai yang baik.					
6.	Saya memperhatikan dan mencatat poin-poin penting setiap penjelasan yang diberikan oleh guru.					
7.	Saya ragu akan mendapatkan nilai yang memuaskan dengan kemampuan yang saya miliki.					
8.	Saya yakin akan menguasai materi <i>spreadsheet</i> .					

9.	Saya belajar dengan giat untuk dapat memahami materi <i>spreadsheet</i> .					
10.	Saya terkadang berbicara dengan teman diluar materi pembelajaran saat guru sedang menjelaskan materi.					
11.	Saya senang diperhatikan oleh guru ketika proses pembelajaran.					
12.	Di kelas, saya mengantuk atau pikiran saya tidak fokus karena pelajaran yang membosankan.					
13.	Media pembelajaran yang digunakan guru menarik dan membuat saya bersemangat.					
14.	Saya sudah nyaman dengan lingkungan belajar saya sekarang.					
15.	Saya senang jika mata pelajaran kosong (guru tidak hadir).					
16.	Saya senang dengan pelajaran tambahan (les).					

### **APPENDIX 3**

- a. Material Expert Validation
- b. Result Recapitulation of Material Expert Validation
- c. Letter of Material Expert Validation

### APPENDIX 3.a. Material Expert Validation

#### ANGKET VALIDASI AHLI MATERI

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Ahli Materi : Rizqi Ilyasa Aghni, M.Pd.

#### Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku ahli materi terhadap kelayakan modul pembelajaran interaktif pada Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

#### Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.



### A. Penilaian Materi

No	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1	Kesesuaian materi dengan Kompetensi Dasar	✓				
2	Kesesuaian materi dengan indikator	✓				
3	Kebenaran konsep		✓			
4	Kelengkapan materi yang dibahas dalam modul		✓			
5	Keakuratan materi yang disajikan dalam modul		✓			
6	Konsep dan definisi yang disajikan tidak menimbulkan banyak tafsir		✓			
7	Kejelasan materi yang disajikan	✓				
8	Keruntutan (sistematika) materi dalam modul	✓				
9	Kejelasan alur logika materi yang disajikan	✓				
10	Kejelasan pembahasan contoh-contoh dalam modul		✓			
11	Kejelasan soal yang disajikan		✓			
12	Kelengkapan soal yang disajikan		✓			
13	Keakuratan soal yang disajikan		✓			
14	Kesesuaian jumlah soal dalam mengukur kompetensi materi yang disajikan		✓			
15	Keragaman soal	✓				
16	Kesesuaian kunci jawaban dengan soal	✓				
17	Kesesuaian penilaian (umpan balik) dengan hasil uji kompetensi siswa		✓			
18	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi		✓			
19	Ejaan dan tanda baca yang digunakan berdasarkan EYD		✓			
20	Aspek bahasa dalam penyajian materi	✓				
21	Rumusan tujuan pembelajaran operasional		✓			
22	Kejelasan petunjuk belajar		✓			
23	Terdapat muatan aspek kognitif		✓			
24	Terdapat muatan aspek afektif		✓			
25	Terdapat muatan aspek psikomotorik		✓			

26	Pemberian latihan (studi kasus) untuk pemahaman konsep		✓			
----	--	--	---	--	--	--

### B. Kebenaran Materi

No	Jenis Kesalahan	Saran Perbaikan
1	Pendahuluan materi kurang sistematis.	Dibuat poin-poin, bukan paragraf.
2	Lampiran studi kasus kurang rapi.	Rapikan file studi kasus.
3	Kesalahan kata : "Kita blok data yang berupa rupiah atau yang berupa uang"	Perbaikan kata : "Kita blok data yang berupa nominal angka pada kolom debet kredit"
4	Kesalahan kata : "Kita ketikkan ini..."	Perbaikan kata : "Kita klik menu..."
5	Kesalahan kata : "Baris kedua dari judul"	Perbaikan kata : "Baris kedua dari kepala kolom atau kepala tabel"
6	Di awal atau di akhir pengelompokan akun pada buku besar seharusnya dijelaskan akun apa saja yang masuk pada tiap kelompok akun, misalnya Aktiva Lancar apa saja yg harus dibuat, Aktiva Tetap apa saja dan seterusnya.	Sebutkan nama akunnya saja, tidak perlu mempraktikkan semua pembuatan buku besar dari kelompok akun tersebut.
7	Penggunaan rumus kurang efektif	Rumus yg ada di biaya gaji bisa ditarik ke bawah untuk memunculkan akun biaya yg lain
8	Dalam video tutorial ketika sudah selesai proses terlalu tiba-tiba.	Diberikan efek transisi.
9	Video tutorial neraca lajur terlalu lama.	Video dipisah ke dalam beberapa video tutorial tiap kolom neraca lajur.
10	Penyataan instrumen banyak yang mengarah pada hasil penelitian (hipotesis).	Hapus pernyataan yang mengarah ada hasil penelitian.

11	Pernyataan instrumen yang mengandung kata sifat dan tidak sesuai dengan pedoman penilaian.	Ubah kata-kata menjadi lebih jelas dan tidak menuju pada sifat atau hasil penilaian.
12	Belum ada butir tentang muatan aspek kognitif, afektif, dan psikomotorik.	Tambahkan butir tentang muatan aspek kognitif, afektif, dan psikomotorik.

### C. Komentaris/Saran

.....  
 .....

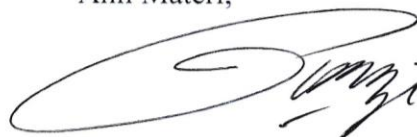
### D. Kesimpulan

Lingkari nomor sesuai dengan kesimpulan:

1. Layak untuk diujicobakan
- ② 2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, 18 - 10 - 2016

Ahli Materi,



Rizqi Ilyasa Aghni, M.Pd.

NIP 19880302 201504 1 002

<b>APPENDIX 3.b. Result Recapitulation of Material Expert Validation</b>
--

### REKAPITULASI HASIL VALIDASI AHLI MATERI

No	Deskripsi	Skor
Aspek Materi		
1	Kesesuaian materi dengan Kompetensi Dasar	5
2	Kesesuaian materi dengan indikator	5
3	Kebenaran konsep	4
4	Kelengkapan materi yang dibahas dalam modul	4
5	Keakuratan materi yang disajikan dalam modul	4
6	Konsep dan definisi yang disajikan tidak menimbulkan banyak tafsir	4
7	Kejelasan materi yang disajikan	5
8	Keruntutan (sistematika) materi dalam modul	5
9	Kejelasan alur logika materi yang disajikan	5
10	Kejelasan pembahasan contoh-contoh dalam modul	4
11	Kejelasan soal yang disajikan	4
12	Kelengkapan soal yang disajikan	4
13	Keakuratan soal yang disajikan	4
14	Kesesuaian jumlah soal dalam mengukur kompetensi materi yang disajikan	4
15	Keragaman soal	5
16	Kesesuaian kunci jawaban dengan soal	5
17	Kesesuaian penilaian (umpan balik) dengan hasil uji kompetensi siswa	4
Rata-Rata Aspek Materi		4.41
Aspek Bahasa		
18	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi	4
19	Ejaan dan tanda baca yang digunakan berdasarkan EYD	4
20	Aspek bahasa dalam penyajian materi	5
Rata-Rata Aspek Bahasa		4.33
Aspek Desain Pembelajaran		
21	Rumusan tujuan pembelajaran operasional	4
22	Kejelasan petunjuk belajar	4
23	Terdapat muatan aspek kognitif	4
24	Terdapat muatan aspek afektif	4
25	Terdapat muatan aspek psikomotorik	4
26	Pemberian latihan (studi kasus) untuk pemahaman konsep	4
Rata-Rata Aspek Desain Pembelajaran		4
Rata-Rata Keseluruhan		4.25
Kategori		Sangat Layak

**APPENDIX 3.c. Letter of Material Expert Validation****SURAT KETERANGAN VALIDASI**

Yang bertanda tangan di bawah ini:

Nama : Rizqi Ilyasa Aghni, M.Pd.

NIP : 19880302 201504 1 002

Instansi : Jurusan Pendidikan Akuntansi Fakultas Ekonomi UNY

telah membaca produk dari peneliti berjudul:

*“Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta”* oleh peneliti:

Nama : Rini Purnawati

NIM : 13803241071

Program Studi : Pendidikan Akuntansi

Setelah memperhatikan produk, maka masukan untuk peneliti adalah seperti yang tercantum dalam lampiran.

Demikian surat ini dibuat untuk digunakan semestinya.

Yogyakarta, 18 Oktober 2016

Ahli Materi,



Rizqi Ilyasa Aghni, M.Pd.

NIP 19880302 201504 1 002

## **APPENDIX 4**

- a. Petition of Media Expert Validation
- b. Media Expert Validation
- c. Result Recapitulation of Media Expert Validation
- d. Letter of Media Expert Validation



### APPENDIX 4.a. Petition of Media Expert Validation

Hal : Permohonan Nara Sumber Ahli

Kepada Yth. Ketua Jurusan Kurikulum dan Teknologi Pendidikan  
Di tempat

Saya yang bertandatangan di bawah ini

Nama : Rini Purnawati  
 NIM : 13803241071  
 Prodi/Fakultas : Pendidikan Akuntansi / Ekonomi  
 No. HP : 085 643 207 759  
 Judul Skripsi/  
 Tesis)\* : Development of Interactive Learning Module in Computer Accounting  
Subject to Improve Student Motivation of Class XI AK 1  
in SMK Negeri 1 Yogyakarta  
 Pembimbing : Mahendra Adhi Nugroho, S.E., M.Sc.

Memohon nara sumber ahli sebagai validator media / ~~materi~~ instrumen)\* penelitian saya.  
 Demikian surat ini saya sampaikan, atas perhatian dan bantuannya, saya ucapkan terima kasih.

Yogyakarta, 9 September 2016  
 Pemohon

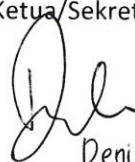


Rini Purnawati

Dosen yang disetujui sebagai nara sumber ahli :

Nama : Estu Miyarso, M.Pd.  
 NIP : 19770203 200501 1 002

Yogyakarta, 9 September 2016  
 Mengetahui,  
 Ketua/Sekretaris Jurusan KTP



Deni Herdianto, M.Pd.  
 NIP. 19810605 200501 1 003

## SURAT PERMOHONAN

Hal : Permohonan Validator Ahli Media

Lamp. : 1 Eksemplar Instrumen Penelitian

Kepada

**Estu Miyarso, M.Pd.**

Di tempat

Dengan hormat,

Dalam rangka pelaksanaan Tugas Akhir Skripsi pada Jurusan Pendidikan Akuntansi, dilakukan penelitian yang berjudul *“Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta”*. Penelitian pengembangan ini dilakukan oleh:

Nama : Rini Purnawati

NIM : 13803241071

Prodi : Pendidikan Akuntansi

Penelitian pengembangan ini memerlukan ahli media untuk memvalidasi media yang telah dikembangkan. Media ini akan digunakan dalam penelitian di SMK Negeri 1 Yogyakarta untuk siswa kelas XI Akuntansi 1. Untuk itu kami mohon kesediaan Bapak menjadi ahli media dan memberikan masukan terhadap media.

Atas kesediaan dan bantuan Bapak, kami mengucapkan terima kasih.

Yogyakarta, 20 September 2016

Hormat saya,

Pemohon



Rini Purnawati

NIM. 13803241071

Mengetahui,

Dosen Pembimbing



Mahendra Adhi Nugroho, M.Sc.

NIP. 198311202008121002



### APPENDIX 4.b. Media Expert Validation

#### ANGKET VALIDASI AHLI MEDIA

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Ahli Media : Estu Miyarso, M.Pd.

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku ahli media terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.

## A. Penilaian Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Ukuran file modul pembelajaran interaktif tidak terlalu besar	✓				
2.	Modul pembelajaran interaktif tidak berjalan lambat		✓			
3.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian		✓			
4.	Pengoperasian modul pembelajaran interaktif ini sederhana		✓			
5.	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>hardware</i>		✓			
6.	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>software</i>		✓			
7.	Proses instalasi media dilakukan dengan mudah	✓				
8.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas		✓			
9.	Media mendukung materi yang disajikan (komunikatif)	✓				
10.	Kreatif dalam menuangkan ide gagasan		✓			
11.	Media dibuat inovatif dan menarik		✓			
12.	Penggunaan <i>background</i> sesuai dan tidak mengganggu		✓			
13.	Penggunaan efek transisi yang menarik		✓			
14.	Tampilan yang digunakan menarik		✓			
15.	Tulisan dapat dibaca dengan baik	✓				
16.	Pemilihan dan komposisi warna yang sesuai	✓				
17.	Proporsi gambar sesuai dengan desain atau tampilan	✓				
18.	Pengaturan tata letak yang sesuai		✓			
19.	Pemilihan jenis huruf	✓				
20.	Navigasi dalam modul mudah digunakan		✓			
21.	Navigasi berfungsi dengan baik		✓			
22.	Video yang disajikan memperjelas materi	✓				

**B. Kebenaran Media**

No	Jenis Kesalahan	Saran Perbaikan
1.	Font terlalu kecil	Font lebih diperbesar
2.	Tampilan slide PETUNJUK terlalu formal.	Tambahkan gambar dan warna yang menarik.
3.	Efek transisi pada tombol navigasi mengganggu	Hilangkan efek transisi pada tombol navigasi

**C. Komentar/Saran**

.....

.....

**D. Kesimpulan**

Lingkari nomor sesuai dengan kesimpulan:

- ① Layak untuk diujicobakan
2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, 20 Oktober 2016

Ahli Media,



Estu Miyarso, M.Pd.

NIP 19770203 200501 1 002

**APPENDIX 4.c. Result Recapitulation of Media Expert Validation**
**REKAPITULASI HASIL VALIDASI AHLI MEDIA**

No	Deskripsi	Skor
<b>Aspek Rekayasa Perangkat Lunak</b>		
1	Ukuran file modul pembelajaran interaktif tidak terlalu besar	5
2	Modul pembelajaran interaktif tidak berjalan lambat	4
3	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian	4
4	Pengoperasian modul pembelajaran interaktif ini sederhana	4
5	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>hardware</i>	4
6	Modul pembelajaran interaktif dapat dijalankan di berbagai spesifikasi <i>software</i>	4
7	Proses instalasi media dilakukan dengan mudah	5
8	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas	4
Rata-Rata Aspek Rekayasa Perangkat Lunak		4.25
<b>Aspek Komunikasi Visual</b>		
9	Media mendukung materi yang disajikan (komunikatif)	5
10	Kreatif dalam menuangkan ide gagasan	4
11	Media dibuat inovatif dan menarik	4
12	Penggunaan <i>background</i> sesuai dan tidak mengganggu	4
13	Penggunaan efek transisi yang menarik	4
14	Tampilan yang digunakan menarik	4
15	Tulisan dapat dibaca dengan baik	5
16	Pemilihan dan komposisi warna yang sesuai	5
17	Proporsi gambar sesuai dengan desain atau tampilan	5
18	Pengaturan tata letak yang sesuai	4
19	Pemilihan jenis huruf	5
20	Navigasi dalam modul mudah digunakan	4
21	Navigasi berfungsi dengan baik	4
22	Video yang disajikan memperjelas materi	5
Rata-Rata Aspek Komunikasi Visual		4.43
<b>Rata-Rata Keseluruhan</b>		<b>4.34</b>
<b>Kategori</b>		<b>Sangat Layak</b>

**APPENDIX 4.d. Letter of Media Expert Validation****SURAT KETERANGAN VALIDASI**

Yang bertanda tangan di bawah ini:

Nama : Estu Miyarso, M.Pd.

NIP : 19770203 200501 1 002

Instansi : Jurusan Kurikulum dan Teknologi Pendidikan FIP UNY

telah membaca produk dari peneliti berjudul:

*“Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta”* oleh peneliti:

Nama : Rini Purnawati

NIM : 13803241071

Program Studi : Pendidikan Akuntansi

Setelah memperhatikan produk, maka masukan untuk peneliti adalah seperti yang tercantum dalam lampiran.

Demikian surat ini dibuat untuk digunakan semestinya.

Yogyakarta, 20 Oktober 2016

Ahli Media,



Estu Miyarso, M.Pd.

NIP 19770203 200501 1 002

## **APPENDIX 5**

- a. Accounting Teacher Validation
- b. Result Recapitulation of Accounting Teacher Validation
- c. Letter of Accounting Teacher Validation



**APPENDIX 5.a. Accounting Teacher Validation**
**ANGKET VALIDASI GURU AKUNTANSI**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Guru Akuntansi : Marsono, S.Pd.

**Petunjuk :**

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Bapak selaku guru akuntansi terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Bapak akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Bapak dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

**Keterangan:**

5 = Sangat Baik

4 = Baik

3 = Cukup

2 = Kurang

1 = Sangat Kurang

4. Komentar atau saran Bapak mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Bapak untuk mengisi angket ini saya ucapkan terima kasih.

### A. Penilaian Materi dan Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Kesesuaian materi dengan Kompetensi Dasar	✓				
2.	Kesesuaian materi dengan indikator	✓				
3.	Kelengkapan materi yang dibahas dalam modul	✓				
4.	Keakuratan materi yang disajikan dalam modul	✓				
5.	Kejelasan materi yang disajikan	✓				
6.	Keruntutan (sistematika) materi dalam modul	✓				
7.	Kejelasan pembahasan contoh-contoh dalam modul.		✓			
8.	Kejelasan soal yang disajikan		✓			
9.	Kelengkapan soal yang disajikan		✓			
10.	Kesesuaian kunci jawaban dengan soal		✓			
11.	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi	✓				
12.	Ejaan dan tanda baca yang digunakan berdasarkan EYD		✓			
13.	Rumusan tujuan pembelajaran operasional		✓			
14.	Kejelasan petunjuk belajar		✓			
15.	Terdapat muatan aspek kognitif		✓			
16.	Terdapat muatan aspek afektif		✓			
17.	Terdapat muatan aspek psikomotorik		✓			
18.	Pemberian latihan (studi kasus) untuk pemahaman konsep	✓				
19.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian		✓			
20.	Proses instalasi media dilakukan dengan mudah		✓			
21.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas		✓			
22.	Kreatif dalam menuangkan ide gagasan	✓				
23.	Penggunaan <i>background</i> sesuai dan tidak mengganggu		✓			



24.	Tampilan yang digunakan menarik		✓			
25.	Pemilihan dan komposisi warna yang sesuai	✓				
26.	Pengaturan tata letak yang sesuai		✓			
27.	Navigasi dalam modul mudah digunakan		✓			
28.	Video yang disajikan memperjelas materi	✓				

### B. Kebenaran Materi dan Media

No	Jenis Kesalahan	Saran Perbaikan
1.	Penulisan angka nominal, misalnya: Rp 50.000.000	Penulisan angka nominal seharusnya Rp 50.000.000,00
2.	Studi Kasus CV. MEDIA, transaksi tanggal 16 Desember 2015: "Perusahaan melunasi utang usaha sebesar Rp 1.500.000,00"	Penulisan yang benar "Perusahaan membayar utang usaha sebesar Rp 1.500.000,00"

### C. Komentar/Saran

.....

.....

### D. Kesimpulan

Lingkari nomor sesuai dengan kesimpulan:

- ① Layak untuk diujicobakan
2. Layak untuk diujicobakan dengan revisi sesuai saran
3. Tidak layak untuk diujicobakan

Yogyakarta, 21 Oktober 2016

Guru Akuntansi,



Marsono, S.Pd.

NIP 197108272008011004

## REKAPITULASI HASIL VALIDASI GURU AKUNTANSI

No	Deskripsi	Skor
Aspek Materi		
1	Kesesuaian materi dengan Kompetensi Dasar	5
2	Kesesuaian materi dengan indikator	5
3	Kelengkapan materi yang dibahas dalam modul	5
4	Keakuratan materi yang disajikan dalam modul	5
5	Kejelasan materi yang disajikan	5
6	Keruntutan (sistematika) materi dalam modul	5
7	Kejelasan pembahasan contoh-contoh dalam modul	4
8	Kejelasan soal yang disajikan	4
9	Kelengkapan soal yang disajikan	4
10	Kesesuaian kunci jawaban dengan soal	4
Rata-Rata Aspek Materi		4.6
Aspek Bahasa		
11	Kesesuaian istilah yang digunakan dalam bidang komputer akuntansi	5
12	Ejaan dan tanda baca yang digunakan berdasarkan EYD	4
Rata-Rata Aspek Bahasa		4.5
Aspek Desain Pembelajaran		
13	Rumusan tujuan pembelajaran operasional	4
14	Kejelasan petunjuk belajar	4
15	Terdapat muatan aspek kognitif	4
16	Terdapat muatan aspek afektif	4
17	Terdapat muatan aspek psikomotorik	4
18	Pemberian latihan (studi kasus) untuk pemahaman konsep	5
Rata-Rata Aspek Desain Pembelajaran		4.17
Aspek Rekayasa Perangkat Lunak		
19	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian	4
20	Proses instalasi media dilakukan dengan mudah	4
21	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas	4
Rata-Rata Aspek Rekayasa Perangkat Lunak		4
Aspek Komunikasi Visual		
22	Kreatif dalam menuangkan ide gagasan	5
23	Penggunaan <i>background</i> sesuai dan tidak mengganggu	4
24	Tampilan yang digunakan menarik	4
25	Pemilihan dan komposisi warna yang sesuai	5
26	Pengaturan tata letak yang sesuai	4
27	Navigasi dalam modul mudah digunakan	4
28	Video yang disajikan memperjelas materi	5
Rata-Rata Aspek Komunikasi Visual		4.43
Rata-Rata Keseluruhan		4.34
Kategori		Sangat Layak

**APPENDIX 5.c. Letter of Accounting Teacher Validation****SURAT KETERANGAN VALIDASI**

Yang bertanda tangan di bawah ini:

Nama : Marsono, S.Pd.  
NIP : 197108272008011004  
Instansi : SMK Negeri 1 Yogyakarta

telah membaca produk dari peneliti berjudul:

*“Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta”* oleh peneliti:

Nama : Rini Purnawati  
NIM : 13803241071  
Program Studi : Pendidikan Akuntansi

Setelah memperhatikan produk, maka masukan untuk peneliti adalah seperti yang tercantum dalam lampiran.

Demikian surat ini dibuat untuk digunakan semestinya.

Yogyakarta, 21 Oktober 2016

Guru Akuntansi,



Marsono, S.Pd.

NIP 197108272008011004

## **APPENDIX 6**

- a. List Attendance of Students in Field Try Out
- b. Sample Students' Response about Media
- c. Result Recapitulation of Students' Response about Media

### APPENDIX 6.a. List Attendance of Students in Field Try Out

#### DAFTAR HADIR UJI COBA LAPANGAN DI KELAS XI AK 2

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Peneliti : Rini Purnawati

NO	NAMA SISWA	TTD
1	MARGARETA VIONA PRASASTI	1
2	MUSYAROFAH	2
3	NONI RAHMATIKA	3
4	NOVIA PURI MIBAWANI	4
5	NUR HIKMATUN NUSROH	5
6	NUR'AINI KEN SALINDRI INDAH PERMATA SARI	6
7	OCTAVIA RESTU NINGTYAS	7
8	OKSI DWIYANTI	8
9	OKTAVIA KASARI	9
10	ORIZA SATIVA	10
11	PRIMAWATI PUSPA WARDANI	11
12	PUJI PUTRI NURANI	12
13	RAFINA SEKAR ARSANTI	13
14	RATIH KUSUMANINGRUM	14
15	RATNASARI APRILIA	15
16	RATRI KURNIA DIAN PALUPI	16
17	RHISKA DWI HARYATI	17
18	RIZKA MARETTA SUKARNO	18
19	RIZKA SULISTYANI	19
20	ROFIQOH SALSABILA ZEIN	20
21	RR. WININDYAH PUTRI LARAS	21
22	SANDYA PRILANINKA YASAN	22
23	SELA MELANIA	23
24	SINTA KURNIA SARI	24
25	SUSI HENDARTI	25
26	SYAFIRA NURUL IKHSAN	26
27	TITANIA LISABRIYANTI	27
28	VIVIAN EVAN SETA	28
29	WINDA AYU SETIAWATI	29
30	YUHANIF AIDINA PUTRI	30
31	YUSI AULIA WARDANI	31
32	ZOANIARISTA FAJRIKA	32

Yogyakarta, 24 Oktober 2016  
Guru Mata Pelajaran,

Marsono, S.Pd.  
NIP 197108272008011004

**DAFTAR HADIR UJI COBA LAPANGAN  
DI KELAS XI AK 2**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Peneliti : Rini Purnawati

NO	NAMA SISWA	TTD	
1	MARGARETA VIONA PRASASTI	1	
2	MUSYAROFAH	2	
3	NONI RAHMATIKA	3	
4	NOVIA PURI MIBAWANI	4	
5	NUR HIKMATUN NUSROH	5	
6	NUR'AINI KEN SALINDRI INDAH PERMATA SARI	6	
7	OCTAVIA RESTU NINGTYAS	7	
8	OKSI DWIYANTI	8	
9	OKTAVIA KASARI	9	
10	ORIZA SATIVA	10	
11	PRIMAWATI PUSPA WARDANI	11	
12	PUJI PUTRI NURANI	12	
13	RAFINA SEKAR ARSANTI	13	
14	RATIH KUSUMANINGRUM	14	
15	RATNASARI APRILIA	15	
16	RATRI KURNIA DIAN PALUPI	16	
17	RHISKA DWI HARYATI	17	
18	RIZKA MARETTA SUKARNO	18	
19	RIZKA SULISTYANI	19	
20	ROFIQOH SALSABILA ZEIN	20	
21	RR. WININDYAH PUTRI LARAS	21	
22	SANDYA PRILANINKA YASAN	22	
23	SELA MELANIA	23	
24	SINTA KURNIA SARI	24	
25	SUSI HENDARTI	25	
26	SYAFIRA NURUL IKHSAN	26	
27	TITANIA LISABRIYANTI	27	
28	VIVIAN EVAN SETA	28	
29	WINDA AYU SETIAWATI	29	
30	YUHANIF AIDINA PUTRI	30	
31	YUSI AULIA WARDANI	31	
32	ZOANIARISTA FAJRIKA	32	

Yogyakarta, 31 Oktober 2016  
Guru Mata Pelajaran,

Marsono, S.Pd.  
NIP 197108272008011004



## APPENDIX 6.b. Sample Students' Response about Media

### ANGKET RESPON SISWA

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Sasaran Program : Siswa Kelas XI AK 1

Peneliti : Rini Purnawati

Petunjuk :

1. Lembar validasi ini dimaksudkan untuk mengetahui pendapat Saudara selaku siswa terhadap kelayakan modul pembelajaran interaktif Kompetensi Dasar Membuat Laporan Keuangan Menggunakan Program Pengolah Angka (*Spreadsheet*).
2. Pendapat, kritik, saran, penilaian, dan komentar Saudara akan sangat bermanfaat untuk memperbaiki dan meningkatkan kualitas media pembelajaran ini.
3. Saudara dimohon memberikan respon pada setiap pertanyaan dalam lembar validasi ini dengan memberikan (✓) pada kolom yang tersedia.

Keterangan:

5 = Sangat Baik

2 = Kurang

4 = Baik

1 = Sangat Kurang

3 = Cukup

4. Komentar atau saran Saudara mohon dituliskan pada kolom yang telah disediakan. Atas kesediaan Saudara untuk mengisi angket ini saya ucapkan terima kasih.

#### A. Penilaian Materi dan Media

No.	Deskripsi	Skala Penilaian				
		5	4	3	2	1
1.	Kejelasan materi yang disajikan	✓				
2.	Keruntutan (sistematika) materi dalam modul		✓			
3.	Kejelasan pembahasan contoh-contoh dalam modul		✓			
4.	Kejelasan soal yang disajikan		✓			
5.	Bahasa yang digunakan mudah untuk dipahami		✓			
6.	Materi yang disajikan dapat menimbulkan komunikasi interaktif		✓			
7.	Materi yang disajikan dalam bentuk modul interaktif dapat memotivasi siswa untuk belajar	✓				
8.	Materi yang disajikan membantu pemahaman siswa	✓				
9.	Materi yang disajikan dalam bentuk modul dapat mendorong siswa belajar secara mandiri	✓				
10.	Modul pembelajaran interaktif tidak <i>hang</i> (berhenti) pada saat pengoperasian		✓			

11.	Proses instalasi media dilakukan dengan mudah		✓			
12.	Modul pembelajaran interaktif ini memiliki petunjuk yang jelas		✓			
13.	Penggunaan <i>backsound</i> tidak mengganggu		✓			
14.	Tampilan yang digunakan menarik	✓				
15.	Pemilihan dan komposisi warna yang sesuai		✓			
16.	Pengaturan tata letak yang sesuai		✓			
17.	Navigasi dalam modul mudah digunakan		✓			
18.	Video yang disajikan memperjelas materi		✓			

#### B. Komentor/Saran

Modul ini sangat menarik sekali. Dapat mempermudah siswa jika terlupa dengan rumus-rumus yang dipakai untuk membuat lap. Keuangan.

Bagus. Semangat terus. Saya suka. Membantu sekali

Yogyakarta, 31 - Oktober 2016

Nama Siswa



NOVIA PURI MIBAWANI



## APPENDIX 6.c. Result Recapitulation of Students' Response about Media

No	Nama	Materi					Bahasa	Desain Pembelajaran			Rekayasa Perangkat Lunak			Komunikasi Visual					
		1	2	3	4	5		6	7	8	9	10	11	12	13	14	15	16	17
1	MARGARETA VIONA PRASASTI	4	5	5	5	4	4	4	5	5	3	4	5	4	4	4	4	4	5
2	MUSYAROFAH	5	5	5	4	5	4	4	4	4	3	3	3	3	3	3	3	3	4
3	NONI RAHMATIKA	5	5	5	5	5	4	5	5	4	2	5	5	4	5	5	5	5	5
4	NOVIA PURI MIBAWANI	5	4	4	4	4	4	5	5	5	4	4	4	4	5	4	4	4	4
5	NUR HIKMATUN NUSROH	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5
6	NUR'AINI KEN SALINDRI I	4	5	5	4	4	4	5	4	4	3	4	5	5	5	4	5	5	5
7	OCTAVIA RESTU NINGTYAS	5	5	5	5	4	5	5	5	4	3	4	5	5	5	5	5	5	5
8	OKSI DWIYANTI	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5
9	OKTAVIA KASARI	4	4	4	3	2	4	4	4	3	3	3	4	4	4	4	4	4	4
10	ORIZA SATIVA	4	5	5	5	5	4	5	4	5	4	4	4	4	5	5	5	5	5
11	PRIMAWATI PUSPA WARDANI	4	5	4	4	4	5	5	4	4	2	4	3	3	4	5	4	4	5
12	PUJI PUTRI NURANI	4	5	5	4	4	5	5	5	5	5	5	5	4	5	5	5	5	5
13	RAFINA SEKAR ARSANTI	3	3	3	3	4	4	4	4	4	2	4	3	4	4	4	4	3	5
14	RATIH KUSUMANINGRUM	4	4	5	3	3	3	3	4	3	2	3	3	3	3	3	4	3	3
15	RATNASARI APRILIA	4	4	4	4	4	5	4	4	4	2	2	4	3	4	4	4	4	4
16	RATRI KURNIA DIAN PALUPI	5	5	5	5	5	5	4	5	5	3	5	5	4	5	5	5	5	5
17	RHISKA DWI HARYATI	4	5	5	4	3	4	4	4	5	4	4	5	4	5	4	4	5	5
18	RIZKA MARETTA SUKARNO	5	5	5	4	5	4	5	5	5	5	3	5	3	4	4	5	5	5
19	RIZKA SULISTYANI	5	5	4	4	4	4	5	5	4	3	4	5	4	4	4	4	4	5
20	ROFIQOH SALSABILA ZEIN	5	5	4	4	4	4	5	5	5	3	4	5	4	4	4	5	4	5
21	RR. WININDYAH PUTRI LARAS	5	5	5	5	5	4	4	4	3	5	5	4	3	4	4	4	5	5
22	SANDYA PRILANINKA YASAN	5	5	5	5	5	4	5	5	5	2	3	4	4	4	4	5	5	5
23	SELA MELANIA	5	5	3	3	4	4	5	3	5	4	3	4	5	5	5	5	4	5
24	SINTA KURNIA SARI	5	5	5	5	4	4	5	5	5	5	4	5	4	4	4	4	5	5
25	SUSI HENDARTI	5	4	5	4	4	4	5	5	5	5	4	4	3	4	4	4	3	5
26	SYAFIRA NURUL IKHSAN	4	5	4	4	5	4	4	4	4	3	4	4	4	3	3	4	5	4
27	TITANIA LISABRIYANTI	4	4	4	4	4	4	4	4	4	3	3	3	3	4	4	4	4	4
28	VIVIAN EVAN SETA	5	4	4	4	5	4	5	5	5	4	4	4	4	4	4	4	4	5
29	WINDA AYU SETIAWATI	5	5	5	5	5	5	5	5	4	5	4	5	4	5	5	5	5	5
30	YUHANIF AIDINA PUTRI	5	5	3	3	3	4	5	5	5	2	3	4	4	4	3	3	4	5
31	YUSI AULIA WARDANI	4	4	4	4	4	3	3	4	4	4	5	5	3	3	3	4	4	4
32	ZOANIARISTA FAJRIKA	5	5	5	4	4	4	5	5	5	4	4	5	5	5	5	5	5	5
Jumlah		555					134	567			374			827					
Rata-Rata		4.34					4.19	4.43			3.90			4.31					
Rata-Rata Keseluruhan		4.23																	
Kategori		Sangat Layak																	

## **APPENDIX 7**

- a. List Attendance of Students in Measurement Learning Motivation
- b. Result Recapitulation of Learning Motivation Before Using Interactive Learning Module
- c. Result Recapitulation of Learning Motivation After Using Interactive Learning Module
- d. Result of Processing Data Using Paired Sample T-Test

# APPENDIX 7.a. List Attendance of Students in Measurement Learning Motivation

## DAFTAR HADIR PENGUKURAN MOTIVASI BELAJAR DI KELAS XI AK 1

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Peneliti : Rini Purnawati

NO	NAMA SISWA	TTD	
1	AILSYA QUTRATU'AIN SA'ADAH	1	
2	ANANDA FADHILA	2	
3	ANGGRAENI PUTRI WIDYANINGRUM	3	
4	ARSITA WINDA FATHARANI	4	
5	ASMARANI SURYA VITASARI	5	
6	AYU WULANDARI	6	
7	BRIGITHA NITA ANDRIANI	7	
8	DELA ANJARSARI	8	
9	DESYANA FRISKA KUMALASARI	9	
10	DHEA NASTASYA ANTORO	10	
11	DWI ANA SETIANINGRUM	11	
12	DWI DAMAYANTI	12	
13	FARADILA AUGUSTA ANGELIN	13	
14	FIFTA AMMARA PUTRI	14	
15	FILIA ARIANA DEWI	15	
16	FITRIA DHELATITA NUR'AINI	16	
17	GALUH MEILINDA	17	
18	GUSMILA LOVNIA ERAWATI	18	
19	HAZNA AZIZAH YUWANDAWATI	19	
20	HERDINAWATI PUTRININGSIH	20	
21	HERNIKA IRNADIANIS	21	
22	IGNASIA DESTYA PUSPA ANGGRAITA	22	
23	IIS SRI MULYA DEWI	23	
24	INDAH RAHMATIKA	24	
25	INDRI FATMAWATI	25	
26	JIMY AYU NUROHMAH	26	
27	LIANA VIKI PRASASTI	27	
28	LISNA RININGSIH	28	
29	MAHESTY TRI CAHYANI	29	
30	MIFTA ANINDITYA RAHMAWATI	30	
31	NUR ADITYA	31	
32	SRI ASTUTI WAHYUNINGSIH	32	

Yogyakarta, 7 November 2016  
Guru Mata Pelajaran,

Marsono, S.Pd.  
NIP 197108272008011004

**DAFTAR HADIR PENGUKURAN MOTIVASI BELAJAR  
DI KELAS XI AK 1**

Judul Penelitian : *Development of Interactive Learning Module in Computer Accounting Subject to Improve Student Motivation of Class XI AK 1 in SMK Negeri 1 Yogyakarta*

Peneliti : Rini Purnawati

NO	NAMA SISWA	TTD	
1	AILSYA QUTRATU'AIN SA'ADAH	1	
2	ANANDA FADHILA	2	
3	ANGGRAENI PUTRI WIDYANINGRUM	3	
4	ARSITA WINDA FATHARANI	4	
5	ASMARANI SURYA VITASARI	5	
6	AYU WULANDARI	6	
7	BRIGITHA NITA ANDRIANI	7	
8	DELA ANJARSARI	8	
9	DESYANA FRISKA KUMALASARI	9	
10	DHEA NASTASYA ANTORO	10	
11	DWI ANA SETIANINGRUM	11	
12	DWI DAMAYANTI	12	
13	FARADILA AUGUSTA ANGELIN	13	
14	FIFTA AMMARA PUTRI	14	
15	FILIA ARIANA DEWI	15	
16	FITRIA DHELATITA NUR'AINI	16	
17	GALUH MEILINDA	17	
18	GUSMILA LOVNIA ERAWATI	18	
19	HAZNA AZIZAH YUWANDAWATI	19	
20	HERDINAWATI PUTRININGSIH	20	
21	HERNIKA IRNADIANIS	21	
22	IGNASIA DESTYA PUSPA ANGGRAITA	22	
23	IIS SRI MULYA DEWI	23	
24	INDAH RAHMATIKA	24	
25	INDRI FATMAWATI	25	
26	JIMY AYU NUROHMAH	26	
27	LIANA VIKI PRASASTI	27	
28	LISNA RININGSIH	28	
29	MAHESTY TRI CAHYANI	29	
30	MIFTA ANINDITYA RAHMAWATI	30	
31	NUR ADITYA	31	
32	SRI ASTUTI WAHYUNINGSIH	32	

Yogyakarta, 14 November 2016  
Guru Mata Pelajaran,

Marsono, S.Pd.  
NIP 197108272008011004

**Data Hasil Angket Motivasi Belajar Sebelum Menggunakan Modul Pembelajaran Interaktif  
Siswa Kelas XI AK 1 SMK Negeri 1 Yogyakarta Tanggal 24 Oktober 2016**

NO	NAMA SISWA	NOMOR ITEM																JUMLAH SKOR	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1	AILSIA QUTRATU' AIN SA'ADAH	4	3	5	3	2	4	2	4	4	2	4	2	4	4	1	3	51	63,8%
2	ANANDA FADHILA	4	2	4	3	2	4	2	4	4	2	4	2	4	4	1	3	49	61,3%
3	ANGGRAENI PUTRI WIDYANINGRUM	5	2	4	3	2	4	2	4	4	2	4	2	4	4	1	3	50	62,5%
4	ARSITA WINDA FATHARANI	3	3	4	3	3	3	3	4	4	2	4	2	3	4	1	4	50	62,5%
5	ASMARANI SURYA VITASARI	5	4	5	4	4	4	3	5	5	2	5	3	5	4	2	3	63	78,8%
6	AYU WULANDARI	4	4	4	3	4	4	3	5	4	3	4	2	5	3	1	3	56	70,0%
7	BRIGITHA NITA ANDRIANI	4	3	4	4	3	4	3	4	4	2	3	2	4	3	2	3	52	65,0%
8	DELA ANJARSARI	4	3	4	3	4	4	4	3	4	3	3	3	3	4	2	3	54	67,5%
9	DESYANA FRISKA KUMALASARI	4	3	5	4	4	4	3	4	4	2	4	3	4	4	2	3	57	71,3%
10	DHEA NASTASYA ANTORO	5	3	4	4	3	4	3	3	4	3	4	2	4	4	2	4	56	70,0%
11	DWI ANA SETIANINGRUM	4	4	4	4	4	4	3	4	4	4	4	2	4	4	1	4	58	72,5%
12	DWI DAMAYANTI	4	2	4	3	3	4	2	3	4	2	3	1	3	3	2	4	47	58,8%
13	FARADILA AUGUSTA ANGELIN	5	3	5	4	3	5	4	5	4	3	4	3	4	3	3	3	61	76,3%
14	FIFTA AMMARA PUTRI	4	4	4	4	5	4	2	4	4	3	3	3	4	4	3	5	60	75,0%
15	FILIA ARIANA DEWI	4	2	4	4	3	4	3	4	4	2	4	2	4	4	2	3	53	66,3%
16	FITRIA DHELATITA NUR'AINI	5	3	4	4	3	4	2	4	4	2	4	1	4	4	1	3	52	65,0%
17	GALUH MEILINDA	4	4	4	3	4	4	4	5	4	4	3	4	4	4	3	2	60	75,0%
18	GUSMILA LOVNIA ERAWATI	5	3	4	4	3	4	3	4	4	3	5	4	4	4	4	4	62	77,5%
19	HAZNA AZIZAH YUWANDAWATI	4	3	4	4	4	4	4	4	4	3	4	3	4	4	1	3	57	71,3%
20	HERDINAWATI PUTRININGSIH	4	3	4	4	3	5	3	5	4	2	4	2	4	5	2	4	58	72,5%
21	HERNIKA IRNADIANIS	5	4	4	4	4	4	3	4	4	2	4	3	4	4	2	4	59	73,8%
22	IGNASIA DESTYA PUSPA A	5	2	4	4	4	4	3	4	4	3	4	2	4	4	2	4	57	71,3%
23	IIS SRI MULYA DEWI	4	3	5	4	3	4	2	4	4	2	5	3	4	4	3	3	57	71,3%
24	INDAH RAHMATIKA	4	3	5	4	5	4	3	4	5	3	3	3	4	4	5	4	63	78,8%
25	INDRI FATMAWATI	3	3	4	3	3	4	3	3	4	2	4	2	4	4	2	4	52	65,0%
26	JIMY AYU NUROHMAH	4	3	5	4	3	4	3	5	4	2	4	1	4	3	2	3	54	67,5%
27	LIANA VIKA PRASASTI	4	4	5	4	3	4	3	4	4	3	3	2	4	4	2	3	56	70,0%
28	LISNA RININGSIH	4	4	5	5	5	4	2	4	5	5	5	3	5	4	5	5	70	87,5%
29	MAHESTY TRI CAHYANI	3	4	5	4	3	4	3	4	4	2	4	2	4	4	3	3	56	70,0%
30	MIFTA ANINDITYA RAHMAWATI	4	3	5	4	3	4	5	4	4	3	4	3	3	4	3	4	60	75,0%
31	NUR ADITYA	4	3	4	4	3	4	2	4	4	3	4	2	4	4	2	3	54	67,5%
32	SRI ASTUTI WAHYUNINGSIH	3	1	5	5	4	4	2	4	5	4	5	2	5	3	2	5	59	73,8%
<b>JUMLAH</b>		132	98	140	121	109	129	92	130	132	85	126	76	128	123	70	112	<b>1803</b>	<b>70,43%</b>
<b>PERSENTASE (%)</b>		83%	61%	88%	76%	68%	81%	58%	81%	83%	53%	79%	48%	80%	77%	44%	70%		

**Data Hasil Angket Motivasi Belajar Setelah Menggunakan Modul Pembelajaran Interaktif  
Siswa Kelas XI AK 1 SMK Negeri 1 Yogyakarta Tanggal 14 November 2016**

NO	NAMA SISWA	NOMOR ITEM																JUMLAH SKOR	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1	AILSIA QUTRATU'AIN SA'ADAH	4	3	5	4	3	5	4	4	4	3	4	4	5	4	2	3	61	76,3%
2	ANANDA FADHILA	4	3	5	4	2	5	3	4	4	2	4	2	4	4	2	3	55	68,8%
3	ANGGRAENI PUTRI WIDYANINGRUM	5	3	5	4	2	5	3	5	5	3	4	2	5	4	2	4	61	76,3%
4	ARSITA WINDA FATHARANI	4	3	4	3	2	4	3	5	4	1	4	2	3	4	1	4	51	63,8%
5	ASMARANI SURYA VITASARI	5	4	4	4	5	5	5	5	4	3	4	4	5	4	3	5	69	86,3%
6	AYU WULANDARI	4	3	4	4	5	4	3	5	4	3	4	2	5	3	3	4	60	75,0%
7	BRIGITHA NITA ANDRIANI	4	4	4	4	4	4	4	4	4	4	4	3	4	4	2	3	60	75,0%
8	DELA ANJARSARI	4	3	4	3	4	4	4	4	4	3	3	3	4	4	2	4	57	71,3%
9	DESYANA FRISKA KUMALASARI	4	4	5	4	4	4	3	5	4	3	4	3	5	4	3	3	62	77,5%
10	DHEA NASTASYA ANTORO	4	4	4	4	5	4	3	4	4	3	4	3	4	4	2	4	60	75,0%
11	DWI ANA SETIANINGRUM	4	4	4	4	4	4	5	4	4	4	4	2	4	4	2	4	61	76,3%
12	DWI DAMAYANTI	4	2	3	4	2	4	2	4	4	3	3	2	3	3	3	3	49	61,3%
13	FARADILA AUGUSTA ANGELIN	4	3	4	4	4	5	4	5	4	3	5	4	4	3	3	3	62	77,5%
14	FIFTA AMMARA PUTRI	4	3	4	4	5	4	4	4	4	3	4	3	4	5	3	5	63	78,8%
15	FILIA ARIANA DEWI	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	63	78,8%
16	FITRIA DHELATITA NUR'AINI	4	3	4	4	3	4	3	4	4	2	4	2	4	4	3	4	56	70,0%
17	GALUH MEILINDA	4	4	4	3	4	4	3	4	4	4	2	2	5	4	4	4	59	73,8%
18	GUSMILA LOVNIA ERAWATI	5	4	4	4	5	4	4	4	4	4	5	4	4	4	4	4	67	83,8%
19	HAZNA AZIZAH YUWANDAWATI	4	4	4	3	4	4	4	4	4	3	4	3	4	4	3	3	59	73,8%
20	HERDINAWATI PUTRININGSIH	4	3	4	4	3	4	3	4	4	2	4	3	5	4	3	4	58	72,5%
21	HERNIKA IRNADIANIS	4	4	5	4	4	4	3	4	5	4	2	3	4	4	4	4	62	77,5%
22	IGNASIA DESTYA PUSPA A	5	3	4	4	3	4	3	4	4	3	4	3	5	4	3	4	60	75,0%
23	IIS SRI MULYA DEWI	5	5	5	5	4	5	4	5	5	4	5	5	5	5	4	4	75	93,8%
24	INDAH RAHMATIKA	4	4	5	4	5	5	3	5	5	3	4	3	5	4	4	4	67	83,8%
25	INDRI FATMAWATI	4	3	4	3	3	4	3	4	4	2	4	2	5	4	2	1	52	65,0%
26	JIMY AYU NUROHMAH	4	4	4	4	4	5	3	4	4	3	4	3	5	4	3	3	61	76,3%
27	LIANA VIKA PRASASTI	4	4	5	4	4	4	4	4	5	3	4	4	5	4	3	4	65	81,3%
28	LISNA RININGSIH	4	3	5	4	5	4	2	4	4	4	4	4	5	3	4	4	63	78,8%
29	MAHESTY TRI CAHYANI	4	4	4	4	3	5	3	4	4	4	4	3	4	4	4	4	62	77,5%
30	MIFTA ANINDITYA RAHMAWATI	4	5	5	4	4	5	5	4	5	4	4	4	5	4	3	4	69	86,3%
31	NUR ADITYA	4	3	4	4	2	4	2	4	4	3	4	2	4	4	2	3	53	66,3%
32	SRI ASTUTI WAHYUNINGSIH	5	4	5	3	4	5	1	5	5	4	5	4	5	5	2	5	67	83,8%
<b>JUMLAH</b>		134	114	138	123	119	139	107	137	135	101	126	97	142	127	91	119	<b>1949</b>	<b>76,13%</b>
<b>PERSENTASE (%)</b>		84%	71%	86%	77%	74%	87%	67%	86%	84%	63%	79%	61%	89%	79%	57%	74%		

**APPENDIX 7.d. Result of Processing Data Using Paired Sample T-Test**
**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Sebelum	56,34	32	4,837	,855
	Sesudah	60,91	32	5,538	,979

**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 Sebelum & Sesudah	32	,620	,000

**Paired Samples Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Sebelum - Sesudah	-4,563	4,565	,807	-6,208	-2,917	-5,654	31	,000

## **APPENDIX 8**

- a. Research License
- b. Letter has been doing Research
- c. Documentation



## APPENDIX 8.a. Research License



### PEMERINTAHAN KOTA YOGYAKARTA

### DINAS PERIZINAN

Jl. Kenari No. 56 Yogyakarta 55165 Telepon 514448, 515865, 515865, 515866, 562682

Fax (0274) 555241

E-MAIL : perizinan@jogjakota.go.id

HOTLINE SMS : 081227625000 HOT LINE EMAIL : upik@jogjakota.go.id

WEBSITE : www.perizinan.jogjakota.go.id

### SURAT IZIN

NOMOR : 070/2884

5707/34

- Membaca Surat : Dari Wakil Dekan I Fak. Ekonomi - UNY  
Nomor : 1500/UN34/18/LT/2016 Tanggal : 9 Agustus 2016
- Mengingat : 1. Peraturan Gubernur Daerah istimewa Yogyakarta Nomor : 18 Tahun 2009 tentang Pedoman Pelayanan Perizinan, Rekomendasi Pelaksanaan Survei, Penelitian, Pendataan, Pengembangan, Pengkajian dan Studi Lapangan di Daerah Istimewa Yogyakarta.
2. Peraturan Daerah Kota Yogyakarta Nomor 10 Tahun 2008 tentang Pembentukan, Susunan, Kedudukan dan Tugas Pokok Dinas Daerah;
3. Peraturan Walikota Yogyakarta Nomor 29 Tahun 2007 tentang Pemberian Izin Penelitian, Praktek Kerja Lapangan dan Kuliah Kerja Nyata di Wilayah Kota Yogyakarta;
4. Peraturan Walikota Yogyakarta Nomor 85 Tahun 2008 tentang Fungsi, Rincian Tugas Dinas Perizinan Kota Yogyakarta;
5. Peraturan Walikota Yogyakarta Nomor 20 tahun 2014 tentang Penyelenggaraan Perizinan pada Pemerintah Kota Yogyakarta;
- Dijinkan Kepada : Nama : RINI PURNAWATI  
No. Mhs/ NIM : 13803241071  
Pekerjaan : Mahasiswa Fak. Ekonomi - UNY  
Alamat : Jl. Colombo No. 1 Yogyakarta  
Penanggungjawab : Mahendra Adhi Nugroho, S.E., M. Sc  
Keperluan : Melakukan Penelitian dengan judul Proposal : DEVELOPMENT OF INTERACTIVE LEARNING MODULE IN COMPUTER ACCOUNTING SUBJECT TO IMPROVE STUDENT MOTIVATION OF CLASS XI AK 1 I SMK NEGERI 1 YOGYAKARTA
- Lokasi/Responden : Kota Yogyakarta  
Waktu : 11 Agustus 2016 s/d 11 November 2016  
Lampiran : Proposal dan Daftar Pertanyaan  
Dengan Ketentuan : 1. Wajib Memberikan Laporan hasil Penelitian berupa CD kepada Walikota Yogyakarta (Cq. Dinas Perizinan Kota Yogyakarta)
2. Wajib Menjaga Tata tertib dan menaati ketentuan-ketentuan yang berlaku setempat
3. Izin ini tidak disalahgunakan untuk tujuan tertentu yang dapat mengganggu kesetabilan pemerintahan dan hanya diperlukan untuk keperluan ilmiah
4. Surat izin ini sewaktu-waktu dapat dibatalkan apabila tidak dipenuhinya ketentuan-ketentuan tersebut diatas

Kemudian diharap para Pejabat Pemerintahan setempat dapat memberikan bantuan seperlunya

Tanda Tangan  
Pemegang Izin

RINI PURNAWATI

Dikeluarkan di : Yogyakarta  
Pada Tanggal : 11 Agustus 2016  
An. Kepala Dinas Perizinan  
Sekretaris



Dra. CHRISTY DEWAYANI, MM  
NIP. 196304081986032019

Tembusan Kepada :

- Yth 1. Walikota Yogyakarta (sebagai laporan)  
2. Ka. Dinas Pendidikan Kota Yogyakarta  
3. Kepala SMK Negeri 1 Yogyakarta  
4. Wakil Dekan I Fak. Ekonomi - UNY  
5. Ybs.

**APPENDIX 8.b. Letter has been doing Research**



**PEMERINTAH KOTA YOGYAKARTA  
DINAS PENDIDIKAN  
SMK NEGERI 1**

Jl. Kemetiran Kidul No 35 Yogyakarta Kode Pos : 55272, Telp. (0274) 512148  
Fax. (0274) 512148

EMAIL : [smkn1yogyakarta@yahoo.com](mailto:smkn1yogyakarta@yahoo.com)

HOT LINE SMS : 08122780001 HOT LINE EMAIL : [upik@jogjakota.go.id](mailto:upik@jogjakota.go.id)

Website : [www.smkn1yogya.sch.id](http://www.smkn1yogya.sch.id)

SURAT KETERANGAN

Nomor : 070/1380

Yang bertanda tangan dibawah ini :

Nama : Dra. Darwestri1380  
NIP : 19580731 198703 2 002  
Pangkat/Golongan : Pembina / IV/a  
Jabatan : Kepala Sekolah

Dengan ini menerangkan bahwa mahasiswa:

Nama : RINI PURNAWATI  
NIM : 13803241071  
Fakultas : Ekonomi  
Perguruan Tinggi : Universitas Negeri Yogyakarta

Telah melaksanakan kegiatan penelitian di SMK Negeri 1 Yogyakarta pada tanggal 11 Agustus 2016 sampai dengan 18 November 2016 untuk memenuhi Tugas Akhir Skripsi dengan judul : “ DEVELOPMENT OF INTERACTIVE LEARNING MODULE IN COMPUTER ACCOUNTING SUBJECT TO IMPROVE TUDENT MOTIVATION OF XI AK 1 SMK NEGERI 1 YOGYAKARTA “

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagai mana mestinya.



Yogyakarta, 21 November 2016  
Kepala Sekolah,

Dra. Darwestri  
NIP 19580731 198703 2 002.

**APPENDIX 8.c. Documentation**

First Meeting on Field Try Out of Class XI AK 2



Second Meeting on Field Try Out of Class XI AK 2





First Meeting on Measurement Learning Motivation of Class XI AK 1



Second Meeting on Measurement Learning Motivation of Class XI AK 1